

General Disclaimer

One or more of the Following Statements may affect this Document

- This document has been reproduced from the best copy furnished by the organizational source. It is being released in the interest of making available as much information as possible.
- This document may contain data, which exceeds the sheet parameters. It was furnished in this condition by the organizational source and is the best copy available.
- This document may contain tone-on-tone or color graphs, charts and/or pictures, which have been reproduced in black and white.
- This document is paginated as submitted by the original source.
- Portions of this document are not fully legible due to the historical nature of some of the material. However, it is the best reproduction available from the original submission.

THE CATALOGUE OF THE DISCRETE SOURCES IN
THE DECLINATION RANGE FROM -13° TO -2°

S. Ya. Braude, A. P. Miroshnitchenko,
K. P. Sokolov, N. K. Sharykin

(NASA-TM-77594) THE CATALOGUE OF THE
DISCRETE SOURCES IN THE DECLINATION RANGE
FROM -13 DEG TO -2 DEG (National Aeronautics
and Space Administration) 51 p
HC A04/MF A01

N85-10887

Unclas

CSCL 03A G3/89 24185

Translation of: Katalog Diskretnykh Istochnikov
v Intervale Skloneniye Ot -13° do -2° , Publication of
the Institute of Radiophysics and Electronics of the
Ukrainian Academy of Sciences, Kharkov, 1980, Preprint No. 1471
51 pages.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
WASHINGTON, D.C. 20546

AUGUST 1984

STANDARD TITLE PAGE

1. Report No. NASA TM-77594		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle THE CATALOGUE OF THE DISCRETE SOURCES IN THE DECLINATION RANGE FROM -13° to -2°				5. Report Date August 1984	
				6. Performing Organization Code	
7. Author(s) S. Ya. Braude, A. P. Miroshnitchenko, K.F. Sokolov, N. K. Sharykin				8. Performing Organization Report No.	
				10. Work Unit No.	
9. Performing Organization Name and Address Leo Kanner Associates Redwood City, CA. 94063				11. Contract or Grant No. NASW-3511	
				13. Type of Report and Period Covered	
12. Sponsoring Agency Name and Address National Aeronautics and Space Adminis- tration, Washington, D.C. 20546				14. Sponsoring Agency Code	
15. Supplementary Notes Translation of "Katalog diskretnykh istochnikov v intervale skloneniye ot -13° do -2° , Publication of the Institute of Radiophysics and Electronics of the Ukrainian Academy of Sciences, Kharkov, 1980, Preprint No. 147, 51 pages.					
16. Abstract The results of the discrete source measurements with declinations $-13^{\circ} < \delta < -2^{\circ}$ and right ascensions $0^h + 24^h$ are given obtained as part of the systematic decametric survey of the celestial sphere with the radiotelescope UTR-2. 316 sources were found in the given declination range, 4 of which were observed for the first time. The comparison was made between the source coordinates measured in the present survey and ones from the 4th Cambridge survey at 178 MHz and the Parkes survey at 408 MHz.					
ORIGINAL PAGE IS OF POOR QUALITY					
17. Key Words (Selected by Author(s))				18. Distribution Statement Unlimited-Unclassified	
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No. of Pages 51	
				22.	

THE CATALOGUE OF THE DISCRETE SOURCES IN
THE DECLINATION RANGE FROM -13° TO -2°

S. Ya. Braude, A. P. Miroshnitchenko,
K. P. Sokolov, N. K. Sharykin

Academy of Sciences Ukrainian SSR,
Institute of Radiophysics and Electronics

Our article is the continuation of publication devoted to the survey of the celestial sphere for frequencies of the decameter range [1-4]. It contains data on the measurements of the densities of the fluxes and the coordinates of discrete sources with declinations between -13° and -2° .

/3*

The measurements were carried out from January 1976 to January 1978 in the radio astronomy observatory of the Institute of Radiophysics and Electronics of the Ukrainian Academy of Sciences with the UTR-2 radiotelescope. The method of measurements, the experimental technique and the processing of the data were described in detail in previous publications [2, 3].

The survey of this range of declination was conducted mainly at the frequencies 12.6; 14.7; 16.7; 20 and 25 MHz; for some sources measurements were also carried out at 10 MHz.

Figure 1 shows a chart of the celestial sphere, indicating the region included in our survey. The double shading designates the region of right ascension RA and declination δ , for which not less than ten measurement sessions were carried out for different orientation of the polar diagram of the telescope.

* Numbers in the margin indicate pagination in the foreign text.

according to the hour angle. The regions with smaller number of measurements are shown by single shading. The dashed lines on the chart show the region of the galactic disk for $b=\pm 10^\circ$.

To a given range of declinations correspond large zenith angles /4 ($52^\circ-63^\circ$) for which the shape both of the main and for the lateral lobes of the polar diagram (DN) of the telescope vary considerably, as compared with the direction close to a zenithal one. In this connection it became necessary to specify the correction related to the effect of confusion, which must be taken into consideration when determining the visible fluxes of discrete sources [2].

Appendix 1 gives formulae and calculated curves of the levels of confusion of the UTR-2 radiotelescope, suitable for any zenithal angles. These data were used in the correction of the observed fluxes.

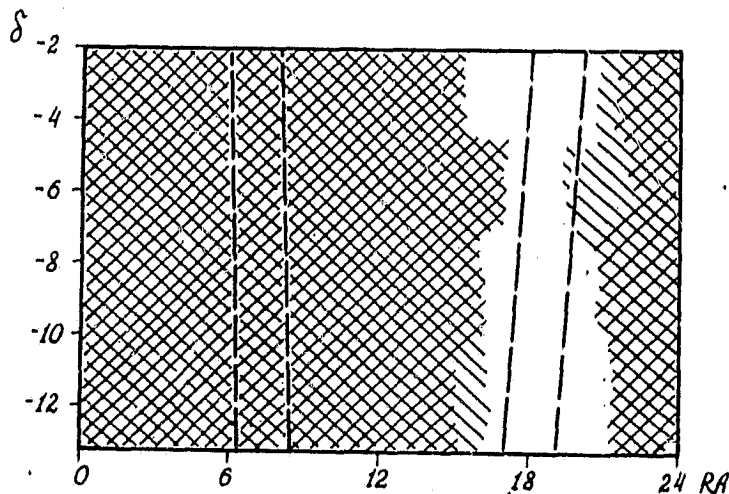


Figure 1.

1. Results

/5

The measured densities of the fluxes of sources and their coordinates, given along 1950, in the declination ranges between -13° and -2° , along with the errors are given in the catalogue of Table 1.

The catalogue contains data on 316 sources, which were divided into three groups: A, B and C in accordance with the reliability of their measurements.

All the designations taken in the catalogue, are either conventional ones, or are explained in [2-4]. For all sources of the catalogue the average values are given of the coordinates, interpolated from the density spectrum of the flux at a frequency 16.7 MHz, the low frequency spectral index, determined in the range 12.6 to 25 MHz, the coefficient of reliability W, the radio and optical identification, the red shift.

This is followed by data on the coordinates and densities of the flux, measured at the corresponding frequencies of the decametric range.

The identification of the observed sources was carried out according to the method of the "nearest neighbor" [5] using the data from the higher frequency catalogues.

In the optical identification and determination of the value of the red shift the data used were taken from publications [6-11]. In this catalogue the following designations have been adopted: G: galaxies; GGA: accumulation of the eybellovsky galaxy; QSO: quasars.

The precision of determination of the coordinates of the sources from this survey, as well as the previous publication of this series [3-4] were carried out by comparison of the coordinates of the sources measured in the decametric range and at higher frequencies.

Figure 2a shows the histograms of the distribution of the number of pairs of sources as a function of distance R between them:

ORIGINAL PAGE 10
OF POOR QUALITY.

16

NO.	SOURCE NAME	RA 1950 H M S	DEC. 1950 D M S	PRN. DMS	PRN. DMS	PRN. DMS	FLUX P.U.	ERR. PC	N	MMA IND.	SP. IND.	ERR. IND.	W	IDENTIFICATION RADIO OPTIC.
1	OR 0004-05	0 4 37 22	-5.89	.07	16.7	140.	22			1.92	1.23	0		30 3, 0
		0 4 37 18	-5.16	.24	12.6	232	23	6	2					
		0 3 27 20	-6.26	.24	14.7	197	25	5	2					
		0 4 37 44	-5.81	.04	16.7	175	21	5	1					
2	OR 0016-11	0 16 53 13	-11.67	.10	16.7	95	24			2.47	1.51	0		00-130
		0 16 58 11	-11.61	.24	16.7	90	17	11	2					
		0 16 58 14	-11.68	.11	20.0	72	23	4	2					
		0 16 18 22	-11.75	.46	25.0	26	43	2	1					
3	OR 0017-09	0 17 39 23	-9.75	.31	16.7	106	46			.43	1.89	0		PK00018-09
		0 17 12 134	-9.76	.80	14.7	87	22	4	1					
		0 19 18 14	-9.29	.04	16.7	89	22	13	2					
		0 17 18 6	-10.09	.08	20.0	132	14	8	1					
		0 17 48 11	-10.68	.11	25.0	65	22	7	2					
4	OR 0020-03	0 20 51 44	-3.20	.13	16.7	109	21			.70	.87	0		40-03.0
		0 20 47 20	-.02	.13	14.7	102	29	3	1					
		0 19 7 14	-.84	.06	16.7	134	21	10	2					
		0 20 10 80	-.62	.17	20.0	86	30	7	2					
		0 21 57 11	-.20	.02	25.0	88	23	6	2					
5	OR 0020-08	0 20 57 22	-8.03	.13	16.7	114	12			.74	.76	B		PK00020-08 0
		0 20 38 14	-8.56	.20	12.6	124	17	9	2					
		0 20 58 9	-8.19	.05	14.7	120	15	20	2					
		0 21 47 10	-7.65	.11	16.7	139	16	5	1					
		0 20 7 11	-7.87	.06	20.0	82	19	15	2					
6	OR 0026-11	0 26 56 8	-11.81	.24	16.7	58	11			2.21	.70	B		PK00027-12
		0 26 48 26	-10.88	.30	12.6	78	48	4	1					
		0 27 18 19	-11.87	.31	14.7	83	29	10	2					
		0 27 8 11	-11.44	.11	16.7	82	20	15	2					
		0 26 48 7	-12.14	.09	20.0	58	14	74	2					
7	OR 0036-02	0 36 30 10	-2.31	.04	16.7	127	6			.68	.26	A		30 17 0 Z=.22
		0 37 7 10	-1.97	.06	12.6	171	18	7	2					
		0 36 37 10	-2.12	.06	14.7	142	15	13	2					
		0 36 57 7	-2.18	.02	16.7	120	15	15	2					
		0 36 37 4	-2.31	.02	20.0	102	12	20	2					
		0 36 7 4	-2.35	.01	25.0	106	13	21	2					
8	OR 0039-09	0 39 37 4	-9.17	.06	16.7	138	8			1.80	.37	A		MSHO-11 00A
		0 39 38 11	-9.31	.06	12.6	173	17	13	2					
		0 39 48 3	-8.65	.03	16.7	185	11	23	2					
		0 39 38 4	-9.12	.02	16.7	150	11	24	2					
		0 39 38 4	-9.20	.01	20.0	106	12	26	2					
		0 39 38 5	-9.20	.01	25.0	58	14	21	2					
9	OR 0039-05	0 39 42 23	-5.97	.11	16.7	112	23			1.68	1.18	0		40-06.03 0
		0 39 48 16	-5.66	.15	12.6	153	23	8	3					
		0 41 18 28	-5.77	.05	14.7	254	35	8	3					
		0 39 18 21	-6.38	.15	16.7	100	28	5	1					
		0 39 18 16	-6.04	.08	20.0	77	27	6	1					

ORIGINAL FORM
OF POOR QUALITY

17

NO.	SOURCE NAME	RA 1950 H M S	DEC. D M S	D 1950 D M S	PMQ. LNG. LMG.	PLUX P.U.	ERR. PC	N	NRA IND.	SP.	ERR. IND.	W	IDENTIFICATION RADIO OPTIC.
10	OR 0040-10	0 40 30	17	-10.88	.09	16.7	71	20		-0.16	.86	B	OB-160
		0 38 58	20	-10.85	.30	12.6	103	32	2				
		0 40 8	55	-11.42	.19	14.7	71	34	15	2			
		0 40 15	62	-11.94	.31	16.7	63	26	18	2			
		0 40 38	8	-10.80	.09	20.0	60	15	12	2			
		0 40 48	13	-10.87	.03	25.0	121	26	9	2			
11	OR 0048-02	0 48 24	22	-2.94	.04	16.7	60	19		2.16	.85	B	4C-03.02 QRO
		0 50 47	24	-2.95	.19	12.6	136	39	11	2			
		0 47 37	17	-2.90	.11	14.7	110	23	9	2			
		0 48 37	9	-3.14	.21	16.7	45	21	9	2			
		0 48 47	10	-2.83	.06	20.0	31	21	4	1			
		0 47 27	11	-2.97	.03	25.0	34	23	7	2			
12	OR 0101-06	1 1 32	13	-6.34	.16	16.7	91	16		.02	.91	C	PERC102-07
		1 1 38	22	-5.62	.15	12.6	107	36	4	1			
		1 1 18	31	-6.64	.15	14.7	52	39	3	1			
		1 2 8	23	-6.69	.06	16.7	06	30	3	1			
		1 1 30	14	-6.33	.06	20.0	95	23	4	2			
13	OR 0109-10	1 5 42	12	-10.69	.13	16.7	64	19		3.28	1.04	C	OC-110
		1 4 19	55	-11.05	1.00	12.6	4	37	4	1			
		1 5 29	15	-10.60	.36	14.7	101	21	5	1			
		1 5 49	22	-10.72	.24	16.7	56	35	6	2			
		1 5 49	15	-10.67	.30	20.0	20	39	5	2			
		1 5 59	22	-10.68	.30	25.0	27	43	2	1			
14	OR 0106-09	1 6 18	26	-9.27	.13							C	OC-011
		1 5 49	20	-9.34	.20	14.7	4	47	6	2			
		1 4 39	21	-9.07	.17	16.7	43	38	9	2			
		1 6 39	9	-9.40	.15	25.0	19	19	2	1			
15	OR 0110-12	1 10 25	25	-12.91	.20							C	OC-119
		1 9 10	59	-13.08	.91	14.7	4	36	3	1			
		1 10 59	15	-12.31	.36	16.7	30	39	5	2			
		1 10 0	14	-12.99	.17	25.0	58	29	4	2			
16	OR 0116-03	1 16 37	22	-3.18	.03	16.7	90	11		3.76	.40	C	OC-030
		1 17 8	17	-3.17	.06	14.7	150	21	4	1			
		1 14 58	26	-3.21	.11	16.7	81	35	4	1			
		1 15 38	24	-3.28	.20	20.0	4	23	2	1			
		1 16 48	9	-3.18	.09	25.0	20	20	2	1			
17	OR 0117-08	1 17 44	27	-8.80	.12	16.7	96	19		3.69	.96	C	OC-026
		1 19 59	34	-7.96	.58	12.6	4	85	4	2			
		1 18 27	34	-9.32	.17	14.7	191	24	8	1			
		1 18 29	24	-8.79	.03	16.7	77	32	10	2			
		1 17 59	10	-8.58	.09	20.0	40	18	6	2			
		1 16 9	18	-9.46	.30	25.0	33	36	2	1			
18	OR 0121-05	1 21 24	24	-5.38	.09							C	4C-04.03 QRO
		1 21 8	29	-5.21	.20	16.7	4	43	4	2			
		1 20 38	13	-5.45	.06	20.0	37	23	7	3			
		1 21 48	9	-5.23	.09	25.0	73	20	2	1			

ORIGINAL PAGE IS
OF POOR QUALITY

18

NO.	BOUNCE NAME	RA 1950 H M S	DEC. D M S	RA 1950 D M S	DEC. D M S	URNG. H M S	PLAZ. F.U.	NRG. PC	N	MMA	SP. IND.	NRG. W	IDENTIFICATION RADIO OPTIC.
19	OR 0129-06	1 29 20	16	-6.83	.07	16.7	47	21			1.20	.81	B PER0129-07 0
		1 29 17	21	-7.02	.17	16.7	30	22	14	3			Z=400
		1 29 19	21	-6.80	.17	20.0	30	18	16	3			
		1 29 29	23	-6.01	.04	25.0	30	19	16	3			
20	OR 0130-11	1 30 43	11	-11.03	.23	16.7	30	22			.08	.85	C PER0130-106 0
		1 31 0	23	-11.82	.38	14.7	37	30	5	2			
		1 30 30	34	-11.71	.20	16.7	4	43	6	2			
		1 30 30	12	-10.84	.15	20.0	47	21	3	1			
		1 30 30	15	-10.84	.15	25.0	51	30	4	1			
21	OR 0132-03	1 32 29	29	-3.43	.34	16.7	68	27			1.04	.94	C OC-032
		1 31 28	25	-3.02	.24	14.7	67	41	2	1			
		1 29 49	104	-4.11	.17	16.7	77	33	4	1			
		1 32 48	13	-3.15	.13	25.0	44	27	2	1			
22	OR 0135-08	1 35 29	9	-8.93	.07	16.7	87	12			1.68	.53	B MEM01-008
		1 35 29	12	-8.40	.13	12.6	108	24	10	2			
		1 35 49	8	-8.56	.04	14.7	95	15	21	3			
		1 35 39	8	-9.03	.04	16.7	107	14	17	2			
		1 35 9	7	-8.91	.02	20.0	72	14	22	2			
		1 35 6	22	-9.10	.04	25.0	56	16	15	2			
23	OR 0136-06	1 36 0	14	-6.03	.37	16.7	80	18			3.54	.86	C 4C-03.06 620
		1 32 38	25	-3.10	.09	12.6	113	41	2	1			Z=308
		1 36 18	25	-3.12	.04	12.6	104	30	2	1			
		1 36 19	18	-6.60	.09	16.7	69	26	8	2			
		1 36 9	9	-6.62	.04	20.0	36	17	8	2			
		1 35 9	16	-6.96	.05	25.0	30	33	5	2			
24	OR 0142-03	1 42 5	19	-3.47	.09	16.7	70	29			1.43	1.40	C 4C-03.04
		1 42 58	19	-3.25	.08	16.7	63	29	10	2			
		1 42 28	14	-3.40	.06	20.0	38	23	12	2			
		1 41 48	8	-3.60	.06	25.0	35	40	3	1			
25	OR 0143-05	1 43 16	29	-3.90	.12	16.7	75	35			2.37	2.98	C 4C-03.07 080
		1 46 8	22	-3.06	.80	14.7	30	46	4	2			
		1 44 49	22	-3.86	.19	16.7	96	30	6	2			
		1 44 49	23	-3.94	.04	20.0	69	37	5	2			
26	OR 0150-08	1 50 12	23	-8.45	.03								C PER0150-09
		1 49 30	31	-8.68	.17	14.7	39		9	2			
		1 49 49	25	-8.49	.11	16.7	82	33	9	2			
		1 50 39	21	-8.45	.02	20.0	146	34	5	1			
27	OR 0150-03	1 50 30	11	-3.63	.15	16.7	74	12			1.40	.65	B 30 53 02A
		1 50 48	21	-3.20	.17	12.6	77		8	2			
		1 49 23	80	-3.47	.21	14.7	82	19	11	2			
		1 50 28	13	-3.20	.05	16.7	91	19	11	2			
		1 49 32	96	-3.20	.09	20.0	48	19	10	2			
		1 50 28	16	-3.84	.02	25.0	49	32	4	2			

ORIGINAL PAGE IS
OF POOR QUALITY

79

WT.	SOURCE NAME	PA 1950 M M S	HR. SEC.	D 1950 DNO.	HR. DNO.	FREQ. MC	FLARE F.V.	HR. PC	M	NRA	SP. IND.	HR.	V	IDENTIFICATION RADIO OPTIC.
28	OR 0151-06	1 51 40	19	-6.54	.12	16.7	28	19			.75	1.47	B	40-05-08
		1 50 49	72	-6.40	.30	12.6	-81	11	3					
		1 52 28	19	-6.41	.13	14.7	33	33	10	3				
		1 51 29	11	-6.71	.11	16.7	27	34	9	3				
		1 51 42	78	-6.52	.19	20.0	25	35	5	1				
29	OR 0156-11	1 56 7	15	-11.19	.18	16.7	161	18			1.56	.90	C	PERO155-10 QRO Z=-612
		1 55 40	22	-11.20	.24	14.7	125	29	8	2				
		1 56 21	19	-11.28	.08	16.7	194	25	7	2				
		1 56 30	21	-10.64	.15	20.0	88	35	2	1				
		1 55 30	19	-10.82	.30	25.0	79	36	3	1				
30	OR 0158-02	1 58 53	24	-2.57	.16								C	00-098 QOA
		1 58 8	25	-2.66	.34	14.7	-44		9	2				
		1 58 27	17	-2.64	.20	16.7	32	40	8	2				
		1 59 22	36	-2.40	.26	20.0	37	22	6	1				
31	OR 0200-11	2 0 34	14	-11.63	.28	16.7	87	19			-0.3	1.58	C	30 37 QRO Z=-68
		2 1 21	44	-11.65	.95	12.6	-97		5	2				
		2 0 11	51	-12.02	.87	16.7	128	61	4	1				
		2 0 31	18	-12.00	.24	16.7	80	25	6	1				
		2 0 31	18	-11.22	.24	20.0	92	29	2	1				
32	OR 0203-05	2 3 19	9	-5.57	.20	16.7	47	18			1.09	.94	C	40-05-09
		2 2 29	48	-5.11	.46	12.6	-94		5	2				
		2 3 29	15	-5.34	.06	16.7	30	25	17	3				
		2 3 19	9	-5.27	.06	20.0	37	18	13	3				
		2 3 9	16	-5.24	.15	25.0	35	42	2	1				
33	OR 0205-10	2 5 49	23	-10.11	.21	16.7	104	78			1.21	2.48	C	00-008
		2 5 40	38	-10.31	.75	16.7	157	64	3	1				
		2 5 30	41	-10.09	.48	20.0	48	62	3	1				
		2 6 0	28	-10.09	.24	25.0	80	54	4	1				
34	OR 0207-10	2 7 51	42	-10.96	.24	16.7	105	21			1.14	.86	C	PERO07-11
		2 8 1	41	-11.77	1.06	12.6	137	54	2	1				
		2 7 12	39	-12.28	.98	16.7	101	74	2	1				
		2 8 41	18	-10.86	.13	20.0	80	28	8	2				
		2 8 1	27	-11.35	.36	25.0	59	52	2	1				
35	OR 0208-03	2 8 48	17	-5.51	.04	16.7	75	24			1.21	1.02	B	40-03-04
		2 9 18	25	-5.64	.20	14.7	118	32	5	2				
		2 9 21	20	-5.54	.11	16.7	62	32	9	2				
		2 8 48	14	-5.50	.21	20.0	49	24	10	2				
		2 8 18	14	-5.51	.03	25.0	57	29	3	1				
36	OR 0223-09	2 23 8	14	-9.23	.19								B	00-040
		2 22 40	39	-9.06	.87	16.7	-27		3	1				
		2 23 10	19	-9.12	.17	12.7	21	46	5	1				
		2 22 45	69	-9.50	.26	20.0	24	36	4	1				
37	OR 0232-03	2 32 55	15	-5.73	.08	16.7	106	26			4.35	1.02	C	40-04-06 QRO Z=-424
		2 32 28	13	-5.74	.23	16.7	113	19	11	2				
		2 32 58	17	-5.66	.06	20.0	36	27	8	2				
		2 33 9	10	-5.87	.09	25.0	18	31	2	1				

ORIGINAL PAGE IS
OF POOR QUALITY

/10

NO.	BOUNCE NAME	HA 1950 H M S	HRH. SEC.	D 1950 DMS.	HRH. DMS.	PHAS. M/S	PLUX P.U.	KUR. PO	M	WRA	BP. IND.	KUR. V	IDENTIFICATION RADIO OPTIC.
38	OR 0237-11	2 37 7	16	-11.39	.18	16.7	41	22			-0.10	1.38	C MEMOZ-11
		2 36 51	73	-10.64	.94	12.6	-23		2	1			
		2 37 11	23	-11.01	.46	14.7	29	47	6	2			
		2 36 32	19	-11.68	.13	16.7	22	43	7	2			
		2 37 22	13	-11.15	.13	20.0	43	21	8	2			
39	OR 0241-02	2 41 32	28	-2.56	.20	16.7	41	32			-0.23	1.44	C 3C 10
		2 42 49	46	-3.95	.47	12.6	-99		7	2			
		2 40 38	16	-3.24	.11	16.7	32	38	7	2			
		2 42 8	11	-2.41	.05	20.0	48	20	5	2			
		2 40 38	21	-2.57	.20	25.0	36	40	2	1			
40	OR 0242-03	2 42 39	49	-5.49	.28	16.7	80	19			1.12	1.23	B 4C-03.12
		2 43 0	19	-6.19	.09	12.6	22	34	10	3			
		2 43 49	13	-5.08	.05	16.7	22	20	13	3			
		2 41 19	13	-5.68	.05	20.0	59	22	14	3			
41	OR 0243-08	2 43 8	11	-8.69	.09								C MEMOZ-016
		2 43 31	56	-9.04	.75	12.6	-25		4	1			
		2 43 1	37	-9.53	.46	14.7	-41		5	2			
		2 43 11	13	-8.09	.12	16.7	22	36	5	2			
		2 43 1	19	-8.83	.06	20.0	48	30	6	2			
42	OR 0254-02	2 54 9	8	-2.85	.11	16.7	80	25			2.17	.93	B 4C-03.10
		2 54 8	40	-3.08	.17	12.6	-114		10	1			
		2 54 18	19	-2.70	.02	16.7	48	21	13	2			
		2 54 18	11	-3.05	.05	20.0	29	19	11	2			
		2 53 58	9	-3.10	.03	25.0	30	19	12	2			
43	OR 0255-03	2 55 51	26	-5.63	.23	16.7	69	17			1.39	.98	C 4C-03.13
		2 57 10	19	-5.76	.08	14.7	104	26	11	3			
		2 55 10	11	-4.39	.13	16.7	40	20	2	1			
		2 56 10	16	-5.72	.06	20.0	47	26	5	2			
		2 56 9	19	-5.49	.04	25.0	52	37	2	1			
44	OR 0257-08	2 57 4	10	-8.32	.18	16.7	50	17			.16	1.24	C MEMOZ-020
		2 57 41	37	-8.17	.46	12.6	-97		4	2			
		2 57 10	15	-7.50	.20	14.7	61	28	6	3			
		2 56 51	11	-7.92	.09	16.7	39	25	9	3			
		2 57 11	12	-8.49	.05	20.0	52	21	8	3			
45	OR 0308-03	3 8 55	46	-5.22	.14	16.7	151	41			2.11	1.92	C 4C-04.09
		3 7 40	62	-5.33	.75	14.7	-56		2	1			
		3 7 49	19	-5.23	.11	16.7	192	26	6	1			
		3 7 31	55	-5.31	.16	20.0	54	26	5	1			
		3 10 19	19	-4.94	.15	25.0	65	37	5	2			
46	OR 0312-08	3 12 41	32	-8.13	.11	16.7	40	32			.71	1.97	C OR-022.5
		3 12 11	41	-8.54	.38	12.6	-89	67	8	3			
		3 12 41	42	-7.73	.72	14.7	-48		9	1			
		3 12 21	13	-8.07	.13	16.7	27	38	10	2			
		3 11 21	19	-8.19	.13	20.0	40	30	7	2			

ORIGINAL PAGE IS
OF POOR QUALITY.

/11

NO.	SOURCE NAME	RA 1950 H M S	DEC. D M S	D 1950 D M S	RAH. D M S	PRMO. D M S	PLUX P.U.	HR. H M S	MRA H M S	SP. IND.	HR. H M S	V	IDENTIFICATION RADIO OPTIC.
47	OR 0319-03	3 13 13	7	-3.26	.08	16.7	71	7		1.24	.37	B	4C-03.11 OR E-1.072
		3 12 49	91	-3.23	1.00	10.0	-119		2	1			
		3 14 28	20	-3.01	.19	12.6	74	41	4	2			
		3 12 59	12	-3.77	.09	14.7	92	19	19	2			
		3 13 19	10	-3.29	.04	16.7	74	16	21	2			
		3 13 9	4	-3.22	.02	20.0	32	12	21	2			
		3 13 28	11	-3.07	.02	23.0	48	23	23	2			
48	OR 0317-08	3 17 16	24	-8.67	.09	16.7	64	20		.76	1.31	C	OB-029.9
		3 16 41	57	-9.02	1.00	12.6	-81		4	1			
		3 18 21	29	-8.94	.08	14.7	88	40	10	2			
		3 18 51	19	-8.75	.11	16.7	31	23	6	2			
		3 17 11	18	-8.59	.04	20.0	60	30	9	3			
49	OR 0323-03	3 23 2	6	-3.26	.03	16.7	85	13		1.87	.37	A	4C-03.12
		3 23 14	14	-3.25	.17	12.6	85	29	20	2			
		3 23 29	9	-3.29	.05	14.7	129	15	17	2			
		3 22 59	7	-3.23	.03	16.7	77	14	25	2			
		3 22 59	6	-3.22	.01	20.0	75	16	30	2			
		3 22 59	8	-3.41	.01	23.0	39	19	24	2			
50	OR 0327-10	3 27 23	27	-10.73	.09	16.7	106	65		1.44	2.37	B	FK0329-11
		3 27 12	27	-10.95	.25	14.7	188	32	8	3			
		3 26 32	18	-10.65	.06	16.7	719	25	8	3			
		3 26 53	11	-11.12	.17	20.0	15	27	8	3			
		3 28 32	14	-10.77	.17	23.0	99	27	4	2			
51	OR 0329-03	3 29 18	23	-3.89	.11	16.7	41	43		2.40	2.42	C	4C-03.13
		3 29 49	20	-3.87	.32	12.6	61	47	8	2			
		3 28 19	21	-3.97	.24	16.7	87	39	4	2			
		3 29 19	15	-3.87	.15	20.0	21	36	3	1			
52	OR 0329-07	3 29 21	13	-7.62	.17	16.7	36	33		1.26	2.07	C	FK0329-07
		3 29 21	21	-7.53	.30	12.6	60	47	3	1			
		3 29 31	13	-7.70	.17	14.7	32	42	8	2			
		3 29 9	27	-7.96	.61	16.7	41	40	11	2			
		3 30 11	27	-7.25	.36	23.0	-13		2	1			
53	OR 0339-04	3 39 14	31	-4.36	.03	16.7	78	16		.98	.54	B	4C-04.12 O
		3 39 39	57	-4.22	.58	12.6	-80		4	1			
		3 38 28	44	-4.15	.31	14.7	80	40	18	2			
		3 38 29	48	-4.90	.59	16.7	90	39	23	2			
		3 38 52	49	-4.37	.03	20.0	57	28	21	2			
		3 40 13	41	-4.50	.08	23.0	55	23	9	2			
54	OR 0338-12	3 38 30	19	-12.68	.26							C	-02-164 OR-169
		3 38 24	50	-13.27	.30	12.6	-100		6	2			
		3 39 4	16	-12.49	.14	16.7	-62	23	8	2			
		3 38 14	10	-12.54	.20	20.0	-26	23	6	2			
55	OR 0348-03	3 48 5	7	-3.98	.08	16.7	51	18		1.76	1.27	B	4C-04.13 O
		3 48 28	24	-3.80	.13	12.6	-74		13	2			
		3 47 59	18	-4.14	.17	14.7	36	48	10	2			
		3 47 59	9	-3.85	.06	16.7	38	18	16	2			
		3 48 9	8	-4.08	.09	20.0	36	16	11	2			

ORIGINAL PAGE 17
OF POOR QUALITY

/12

NO.	SOURCE NAME	RA 1950 H M S	DEC. 1950 HR. MIN. SEC.	D 1950 DMS. DMS.	PMNQ. PMQ. PMQ.	PLAT P.U. P.U.	DEP. N PO	HA HA	SP. IND.	HR. HR.	V V	IDENTIFICATION RADIO OPTIC.
36	OR 0350-07	3 30 27	16	-7.48	.10	16.7	78	9	.52	.43	B	3C M QND Z=1.941
		3 30 28	74	-7.45	.44	12.6	50	34	13	3		
		3 30 29	42	-7.30	.37	14.7	84	14	24	4		
		3 30 18	23	-7.07	.42	14.7	86	12	29	4		
		3 30 29	23	-7.34	.37	20.0	61	12	34	4		
		3 30 39	40	-7.50	.09	25.0	71	16	33	4		
37	OR 0356-01	3 36 30	38	-2.28	.18						C	40-03.12 0
		3 36 18	49	-2.10	.45	12.6	4 61	23	5	2		
		3 37 28	14	-2.21	.08	14.7	36	23	12	2		
		3 37 38	11	-2.71	.11	20.0	40	38	5	1		
38	OR 0359-08	3 59 13	30	-8.97	.18	16.7	52	36	.32	2.36	C	3C100
		3 59 21	19	-8.14	.13	14.7	68	32	10	3		
		4 0 24	13	-8.36	.13	16.7	30	39	9	3		
		3 57 24	14	-9.07	.04	20.0	31	24	2	1		
39	OR 0401-02	4 1 2	11	-2.97	.03	16.7	54	29	1.48	.90	B	60-03.16
		4 1 19	64	-2.78	.28	12.6	4 73	46	10	1		
		4 1 28	14	-3.04	.13	16.7	37	20	14	2		
		4 1 19	12	-3.01	.04	20.0	48	20	14	2		
		4 0 49	7	-2.93	.07	25.0	39	17	12	2		
60	OR 0405-11	4 5 46	6	-11.96	.16	16.7	72	2	2.36	.22	B	PER0405-18 QND Z=1.934
		4 5 14	16	-12.37	.20	12.6	99	39	17	3		
		4 5 46	10	-11.66	.09	16.7	101	17	23	4		
		4 5 39	9	-11.49	.09	16.7	80	12	29	4		
		4 5 24	5	-12.13	.09	20.0	44	12	24	4		
		4 5 34	5	-12.20	.04	25.0	39	13	21	4		
61	OR 0406-02	4 6 34	17	-2.99	.12	16.7	66	21	1.97	.88	B	40-03.17
		4 6 49	72	-3.31	.73	12.6	4 36	32	8	1		
		4 6 39	17	-3.34	.19	14.7	80	32	2	1		
		4 6 39	22	-3.43	.13	16.7	67	40	1	8		
		4 6 39	19	-3.35	.09	20.0	107	20	1	2		
		4 6 29	17	-2.88	.05	25.0	77	34	4	2		
62	OR 0411-08	4 11 18	15	-8.36	.10	16.7	58	52	1.53	2.14	B	60-08
		4 11 22	19	-8.40	.17	16.7	48	34	9	3		
		4 11 32	22	-8.38	.05	20.0	82	22	3	2		
		4 11 1	21	-7.77	.24	25.0	23	40	2	1		
63	OR 0419-06	4 19 5	18	-6.23	.06	16.7	64	16	1.20	.69	B	30-08 QND Z=1.939
		4 18 58	72	-6.41	.76	12.6	106	37	10	3		
		4 18 31	13	-6.43	.04	16.7	54	23	10	3		
		4 18 40	9	-6.04	.05	20.0	63	17	10	3		
		4 15 1	9	-6.28	.02	25.0	32	20	8	2		
64	OR 0416-02	4 16 39	6	-2.93	.06	16.7	89	9	1.38	.47	A	30-08
		4 18 18	62	-2.41	.38	10.0	404	20	4	1		
		4 17 28	8	-2.37	.03	12.6	103	20	14	2		
		4 17 9	6	-2.72	.02	14.7	84	14	28	2		
		4 16 39	4	-3.07	.02	14.7	408	11	26	2		
		4 16 49	3	-3.24	.01	20.0	77	12	29	2		
		4 16 39	6	-2.88	.01	25.0	37	19	29	2		

13

11

ORIGINAL PAGE
OF POOR QUALITY

14

NO.	EXPOSE NAME	HA 1550 H M S	HRH. SND.	11 1550 DMG.	HRH. DMG.	PRMG. MTZ.	PLAX F.U.	HRH. PC	H	MRA	SP. END.	HRH.	W	IDENTIFICATION RADIO OPTIC.
74	OR 0501-12	5 1 17	15	-12.47	.17	16.7	56	68			1.00	2.20	C	PK50459-12
		5 1 35	14	-12.17	.24	16.7	38	31	5	1				
		5 1 5	17	-12.36	.03	20.0	52	18	15	3				
		5 0 35	22	-12.86	.11	25.0	16	12	5	2				
75	OR 0503-09	5 3 30	14	-9.41	.23	16.7	61	27			1.34	1.17	C	PK50928-10 G 2.041
		5 2 10	58	-8.65	.29	14.7	83	30	9	2				
		5 3 32	10	-9.52	.13	20.0	44	18	10	3				
		5 7 11	51	-9.60	.29	25.0	45	34	5	3				
76	OR 0506-02	5 6 22	14	-7.64	.07	16.7	74	25			1.58	.83	B	CO-011
		5 6 58	33	-2.82	.17	14.7	72	52	7	1				
		5 7 28	32	-1.72	.30	16.7	38	21	7	2				
		5 6 9	12	-2.65	.04	20.0	60	22	10	2				
		5 6 19	11	-2.74	.39	25.0	37	23	5	1				
77	OR 0507-07	5 7 28	29	-7.72	.18	16.7	54	40			.84	1.71	C	PK50308-07
		5 9 12	64	-7.32	.75	12.6	58	30	3	1				
		5 7 52	22	-8.11	.09	14.7	104	30	7	2				
		5 7 12	15	-8.17	.20	16.7	27	42	5	1				
		5 6 32	13	-8.12	.15	20.0	30	24	7	2				
		5 8 52	16	-7.63	.06	25.0	70	33	2	1				
78	OR 0518-02	5 18 38	34	-2.37	.07	16.7	87	12			3.07	.62	C	4C-02.21
		5 17 28	17	-2.36	.16	12.6	218	22	9	2				
		5 18 59	19	-2.46	.05	14.7	113	21	8	2				
		5 11 59	18	-2.45	.27	16.7	89	25	4	1				
		5 18 18	18	-2.74	.06	20.0	52	29	2	1				
79	OR 0520-08	5 20 43	34	-8.20	.12	16.7	101	53			3.47	2.30	C	MSM05-708
		5 19 42	39	-8.76	.45	14.7	70	39	6	2				
		5 20 7	26	-8.46	.20	16.7	68	39	3	1				
		5 20 22	18	-8.17	.08	20.0	77	28	3	1				
		5 22 12	23	-7.82	.30	25.0	16	45	2	1				
80	OR 0524-09	5 24 36	14	-9.30	.18	16.7	44	24			2.20	.83	C	PK50524-09
		5 23 22	41	-8.15	.58	14.7	39	23	5	2				
		5 26 13	9	-8.39	.17	16.7	38	23	6	2				
		5 23 53	35	-9.61	.16	20.0	38	22	10	3				
		5 24 53	7	-9.29	.11	25.0	17	17	5	2				
81	OR 0526-03	5 26 57	22	-3.82	.04	16.7	41	9			1.57	.52	B	PK50524-04
		5 27 39	11	-3.82	.06	12.6	60	30	22	2				
		5 27 9	13	-3.83	.04	14.7	49	29	27	2				
		5 26 15	10	-3.78	.21	16.7	45	21	27	2				
		5 26 7	85	-3.33	.45	20.0	30	15	29	2				
82	OR 0528-05	5 28 38	13	-5.30	.19	16.7	49	29			1.61	1.62	C	
		5 28 51	11	-4.02	.08	12.6	52	33	10	2				
		5 28 22	14	-3.32	.05	14.7	80	22	16	3				
		5 28 44	75	-3.85	.39	16.7	20	49	11	2				
		5 27 11	66	-4.92	.26	20.0	36	24	5	1				

ORIGINAL PAGE 12
OF POOR QUALITY

/15

NO.	BOUNCE NAME	RA 1950 H M S	DEC. S M S	RA 1950 D M S	DEC. D M S	FLUX P.O.	FLUX P.O.	RA PC	RA PC	SP. IND.	RA IND.	W	IDENTIFICATION RADIO OPTIC.
83	OR 0533-11	5 33 42	18	-11.29	.24	16.7	31	32		1.15	1.33	M	FKS0533-12 G
		5 34 24	18	-11.47	.26	12.6	4	72	11				
		5 33 44	11	-11.41	.13	16.7	37	27	12				
		5 33 14	9	-11.24	.13	20.0	18	27	12				
		5 34 24	16	-10.55	.20	25.0	24	31	4				
84	OR 0534-02	5 34 48	9	-2.89	.04	16.7	56	58		2.04	1.84	B	FC146 G
		5 34 29	26	-3.00	.17	16.7	93	35	4				
		5 34 59	7	-3.04	.06	20.0	31	18	16				
		5 34 39	7	-2.87	.02	25.0	27	17	16				
85	OR 0542-02	5 42 43	13	-2.95	.19	16.7	66	31		3.52	1.95	C	
		5 41 49	30	-2.43	.08	12.6	113	44	5				
		5 42 9	16	-3.19	.06	16.7	87	23	22				
		5 42 39	9	-2.97	.03	20.0	31	19	17				
86	OR 0548-09	5 48 30	30	-9.69	.16	16.7	29	22		.58	1.02	D	FKS0549-10
		5 50 42	66	-9.34	.26	14.7	40	50	14				
		5 50 24	64	-10.50	.50	16.7	30	26	21				
		5 48 29	95	-9.71	.30	20.0	21	25	11				
		5 48 17	17	-9.65	.15	25.0	18	34	5				
87	OR 0557-08	5 57 0	26	-8.46	.12	16.7	43	17		-.16	.64	B	FKS055-071
		5 55 53	30	-8.80	.75	12.6	4	89	4				
		5 57 2	15	-8.77	.15	16.7	36	41	11				
		5 55 22	22	-8.40	.09	16.7	63	37	7				
		5 56 22	13	-8.37	.05	20.0	47	22	12				
		5 57 53	11	-9.27	.17	25.0	51	23	2				
88	OR 0603-06	6 3 43	28	-6.09	.11	16.7	104	13		.53	1.22	C	FKS0603-06
		6 4 41	32	-6.15	.38	12.6	419		6				
		6 5 11	22	-6.88	.24	14.7	95	32	4				
		6 3 31	16	-6.13	.08	16.7	115	20	14				
		6 3 1	17	-6.01	.06	20.0	87	28	4				
89	OR 0607-07	6 7 21	26	-7.41	.07	16.7	49	18		1.49	.67	B	FKS0607-07 FKS0603-07
		6 6 41	20	-6.96	.08	14.7	76	33	8				
		6 7 27	47	-6.94	.24	16.7	37	36	9				
		6 7 45	41	-7.29	.20	20.0	36	15	20				
		6 8 4	23	-7.44	.02	25.0	28	18	8				
90	OR 0613-03	6 13 18	9	-3.49	.05	16.7	61	13		.83	.66	A	4C-03.22
		6 13 39	14	-3.23	.06	12.6	80	30	24				
		6 13 25	8	-3.35	.04	14.7	51	21	24				
		6 13 29	8	-3.33	.03	16.7	19	15	20				
		6 13 9	5	-3.39	.02	20.0	48	12	24				
		6 12 49	12	-3.55	.01	25.0	47	25	20				
91	OR 0620-02	6 20 47	12	-2.30	.09	16.7	76	24		2.07	.79	B	4C-02.25
		6 21 19	14	-2.59	.02	15.7	70	20	20				
		6 20 18	11	-2.29	.03	20.0	61	20	24				
		6 20 49	5	-2.49	.03	25.0	32	10	20				

ORIGINAL PAGE IS
OF POOR QUALITY

/16

NO.	SOURCE NAME	RA 1950 H M S	DEC. D M S	D 1950 D M S	RA 1950 D M S	DEC. D M S	PLANE P.U.	ENH. PC	N	MRA IND.	SP. IND.	ENH. IND.	W	IDENTIFICATION RADIO OPTIC.
92	OR 0682-07	6 22 34	17	-7.42	.07	16.7	70	20			2.78	1.18	B	OR-03.37
		6 22 2	15	-7.48	.58	12.6	135	24	9	3				
		6 22 12	18	-7.79	.11	14.7	87	27	5	2				
		6 22 22	13	-7.80	.06	16.7	99	20	9	2				
		6 23 12	13	-8.16	.17	20.0	33	23	6	2				
93	OR 0675-05	6 25 24	6	-5.49	.15	16.7	351	6			1.31	.26	A	OC161 Q
		6 25 40	8	-5.49	.04	12.6	560	20	22	3				
		6 25 50	9	-5.27	.03	14.7	420	20	24	3				
		6 25 11	5	-5.59	.07	16.7	323	15	27	3				
		6 25 21	4	-5.81	.01	20.0	270	16	27	3				
		6 25 30	6	-5.18	.01	25.0	219	16	21	3				
94	OR 0671-03	6 31 47	17	-3.46	.11	16.7	35	21			2.45	1.16	B	4C-03.23
		6 31 39	19	-3.31	.15	12.6	114	31	16	2				
		6 32 29	19	-3.41	.27	14.7	34	33	12	2				
		6 31 9	19	-3.58	.13	16.7	69	28	9	2				
		6 31 49	13	-3.44	.26	20.0	33	23	8	2				
95	OR 0672-09	6 32 17	19	-9.48	.23								C	OR-053
		6 31 3	55	-9.56	.87	12.6	4 84		4	1				
		6 32 13	63	-9.57	.83	16.7	4 49		2	1				
		6 32 13	21	-9.89	.36	16.7	35	47	4	1				
		6 32 33	21	-9.56	.30	20.0	31	36	3	1				
96	OR 0675-02	6 35 56	24	-2.30	.12								C	4C-02.27
		6 37 38	74	-2.15	.75	12.6	4 63		2	1				
		6 36 9	42	-2.40	.54	14.7	4 73		5	1				
		6 35 18	66	-2.73	.21	16.7	67	26	7	1				
		6 35 48	22	-2.75	.06	20.0	31	35	3	1				
97	OR 0635-11	6 35 30	41	-11.51	.16	16.7	58	19			-2.24	1.44	C	OR-160
		6 35 14	74	-11.42	.02	12.6	114		2	1				
		6 34 54	25	-11.15	.36	14.7	46	54	3	1				
		6 37 25	22	-12.03	.76	16.7	56	35	2	1				
		6 35 5	21	-12.36	.06	20.0	88	33	5	2				
98	OR 0641-06	6 41 43	14	-6.72	.17	16.7	59	54			-1.66	2.53	C	4C-06.16
		6 41 51	38	-6.02	.46	12.6	4 78		5	2				
		6 41 21	24	-6.40	.20	16.7	39	48	5	1				
		6 41 51	17	-6.72	.08	20.0	42	27	3	1				
		6 41 55	86	-7.30	.26	25.0	44	59	4	1				
99	OR 0643-09	6 43 46	12	-9.30	.15	16.7	40	13			2.37	.80	B	MSND6-010
		6 43 2	83	-9.97	.48	12.6	72	43	18	3				
		6 44 10	54	-8.29	.40	14.7	36	45	20	3				
		6 43 57	43	-9.57	.31	16.7	47	17	27	4				
		6 44 30	47	-9.26	.63	20.0	29	18	15	2				
		6 43 43	11	-9.30	.09	25.0	9	44	4	2				
100	OR 0645-02	6 45 48	15	-2.34	.02	16.7	47	14			-1.10	.62	C	4C-02.28
		6 45 38	12	-2.33	.10	12.6	57	59	28	2				
		6 45 18	6	-2.61	.13	16.7	39	28	35	2				
		6 45 49	5	-2.43	.09	20.0	31	12	31	2				
		6 46 28	7	-2.34	.01	25.0	48	17	86	2				

ORIGINAL PAGE IS
OF POOR QUALITY

/17

NO.	SOURCE NAME	RA 1950 H M S	DEC. D M S	HRH. D M S	PMH. D M S	PLIX P.U.	HRH. PC	N	MRA	SP. IND.	HRH.	V	IDENTIFICATION RADIO OPTIC.
101	OR 0650-06	6 50 4	15	-6.36	.12	16.7	46	22		1.94	1.08	B	CULO650-06
		6 50 31	26	-5.82	.30	12.6	54	63	6	2			
		6 49 30	58	-5.37	.38	14.7	42	46	11	3			
		6 50 0	50	-6.41	.08	16.7	47	35	14	3			
		6 49 16	27	-6.20	.29	20.0	37	15	17	3			
		6 50 11	13	-6.43	.11	25.0	12	39	2	1			
102	OR 0650-03	6 50 43	42	-3.26	.15	16.7	28	74		.80	2.15	C	40-03.25
		6 51 49	14	-3.47	.13	16.7	19	35	2	1			
		6 49 39	11	-3.10	.17	20.0	33	38	2	1			
		6 49 59	15	-3.10	.15	25.0	19	39	2	1			
103	OR 0653-08	6 53 8	33	-8.56	.16	16.7	53	21		1.11	1.03	C	OR-092
		6 53 52	19	-8.35	.17	14.7	70	32	2	1			
		6 52 53	18	-9.08	.15	16.7	34	42	6	2			
		6 52 22	13	-8.49	.08	20.0	46	22	7	3			
		6 53 2	24	-8.30	.24	25.0	33	45	3	1			
104	OR 0656-02	6 56 26	14	-2.46	.16							C	MSK16-012
		6 56 8	86	-2.15	.75	12.6	<102		2	1			
		6 56 29	43	-2.63	.59	16.7	<49		2	1			
		6 55 39	20	-2.77	.15	20.0	85	32	5	2			
		6 56 38	13	-2.30	.11	25.0	21	27	5	2			
105	OR 0658-08	6 58 55	22	-8.90	.10	16.7	51	21		2.49	1.32	B	01-002
		6 58 12	25	-8.68	.30	12.6	70	30	8	2			
		7 0 6	43	-9.48	.27	14.7	39	26	13	3			
		6 59 2	16	-8.88	.04	16.7	78	23	12	3			
		6 59 17	73	-8.64	.64	20.0	30	15	17	2			
106	OR 0658-06	6 58 53	20	-6.32	.16							C	01-001 OR-099
		6 58 31	55	-6.88	.54	14.7	<46		3	1			
		6 59 11	26	-6.43	.20	16.7	67	38	7	3			
		6 58 41	24	-6.22	.15	20.0	39	38	4	2			
107	OR 0703-03	7 3 41	21	-3.09	.15	16.7	49	19		2.63	.89	B	40-03.26
		7 3 37	20	-2.44	.34	12.6	81	22	18	2			
		7 3 55	82	-3.02	.47	16.7	92	20	29	2			
		7 3 9	112	-3.26	.20	16.7	55	32	24	2			
		7 4 38	77	-3.11	.12	20.0	27	21	19	2			
108	OR 0704-12	7 4 38	25	-12.28	.20	16.7	74	16		.64	.86	C	01-106
		7 5 4	22	-12.16	.75	12.6	87	39	2	1			
		7 5 14	16	-11.83	.20	14.7	82	25	5	2			
		7 4 5	43	-12.42	.11	20.0	66	22	6	2			
109	OR 0705-07	7 5 34	13	-7.72	.09	16.7	41	26		-.76	1.06	B	20174
		7 4 32	68	-7.39	1.00	12.6	<66		3	1			
		7 5 42	22	-7.62	.30	14.7	28	69	7	2			
		7 5 22	10	-7.55	.06	20.0	48	18	8	2			
		7 6 2	16	-7.84	.05	25.0	52	32	8	2			

ORIGINAL PAGE 17
OF POOR QUALITY

/18

NO.	SOURCE NAME	RA 1950 H M S	DEC. S	D 1950 DMS.	PKMS. MIZ.	FLUX F.U.	HR. PC	N	MRA	SP. DMS.	HR.	W	IDENTIFICATION RADIO OPTIC.
110	OR 0707-05	7 7 9	9	-5.79	.24	16.7	66	16		2.67	.98	B	01-G12
		7 6 30	26	-5.29	.24	12.6	142	36	10				
		7 6 30	32	-5.18	.06	14.7	116	41	8				
		7 7 11	9	-6.04	.06	16.7	68	16	15				
		7 7 19	11	-6.27	.06	20.0	31	21	13				
		7 6 30	24	-5.12	.17	25.0	50	47	3				
111	OR 0714-11	7 14 47	11	-11.05	.06	16.7	83	20		1.89	1.00	A	MEMO7-104
		7 14 24	82	-11.29	.95	10.0	-105		3				
		7 16 13	35	-10.74	.15	12.6	-90		9				
		7 14 17	16	-10.88	.30	14.7	57	31	17				
		7 14 54	13	-10.96	.06	16.7	116	20	17				
		7 14 44	10	-11.18	.06	20.0	59	19	20				
		7 14 54	14	-11.01	.08	25.0	33	29	11				
112	OR 0722-12	7 22 6	21	-12.66	.11	16.7	46	15		.01	.51	B	MEMO7-107
		7 22 33	31	-12.86	.80	12.6	66	62	3				
		7 23 5	25	-12.30	.58	14.7	49	50	6				
		7 24 38	35	-12.71	.51	16.7	41	37	12				
		7 23 5	45	-12.88	.38	20.0	41	27	8				
		7 21 45	10	-12.64	.11	25.0	48	21	3				
113	OR 0723-09	7 23 11	27	-9.29	.10	16.7	64	10		.40	.79	B	30178 G Z=0.004
		7 21 3	24	-9.59	.75	12.6	-80		2				
		7 24 22	16	-9.46	.13	14.7	62	29	8				
		7 23 3	11	-9.38	.06	16.7	67	19	14				
		7 23 13	10	-9.31	.03	20.0	58	18	14				
114	OR 0725-05	7 25 13	11	-5.35	.07	16.7	115	16		1.78	.72	A	40-06.17
		7 26 30	33	-5.63	.75	10.0	-123		2				
		7 25 20	19	-5.72	.15	12.6	252	23	14				
		7 25 21	16	-5.95	.03	14.7	110	22	21				
		7 25 20	13	-5.77	.09	16.7	91	19	17				
		7 24 40	14	-5.33	.04	20.0	78	24	16				
		7 25 20	13	-5.46	.02	25.0	103	27	13				
115	OR 0734-06	7 34 18	15	-6.05	.13	16.7	82	20		3.23	.77	C	01-055
		7 34 11	26	-6.47	.24	14.7	-50		5				
		7 33 41	14	-6.17	.06	16.7	90	21	6				
		7 34 40	16	-5.80	.11	20.0	36	26	4				
		7 34 30	10	-5.71	.13	25.0	24	21	2				
116	OR 0736-03	7 36 25	21	-3.18	.15	16.7	55	17		2.13	.80	A	40-03.27
		7 37 19	68	-3.23	.82	10.0	-208		4				
		7 35 19	18	-2.97	.11	12.6	102	31	11				
		7 36 9	97	-2.86	.26	14.7	120	31	17				
		7 36 52	17	-3.04	.32	16.7	36	24	18				
		7 37 0	32	-3.21	.30	20.0	37	20	25				
		7 36 48	18	-3.56	.13	25.0	30	36	10				
117	OR 0741-05	7 41 26	9	-6.00	.14	16.7	98	24		1.56	.82	C	40-06.18
		7 41 40	17	-5.15	.08	16.7	106	24	7				
		7 41 10	11	-6.07	.04	20.0	68	19	10				
		7 41 30	7	-6.02	.02	25.0	52	13	2				

ORIGINAL PAGE IS
OF POOR QUALITY

/19

NO.	SOURCE NAME	HA 1950 H M S	HR.	D 1950 DMS.	HR.	PRIN. DMS.	PLAN. P.U.	HR.	M	MRA	SP. IND.	HR.	M	IDENTIFICATION RADIO OPTIC.
118	OR 0743-08	7 43 57	21	-8.42	.24	16.7	59	12			1.73	.71	C	MEMOT-010
		7 43 12	31	-8.81	.20	10.0	142	69	2	1				
		7 43 32	35	-9.32	.20	12.6	4 39		3	1				
		7 43 52	17	-7.87	.24	14.7	4 48		5	2				
		7 44 30	17	-8.44	.15	16.7	59	27	11	2				
		7 43 22	18	-8.11	.13	20.0	43	29	5	1				
119	OR 0745-03	7 45 32	32	-3.69	.09	16.7	48	16			.44	.34	C	40-03.30
		7 46 49	37	-3.25	.54	12.6	4 68		4	1				
		7 46 39	20	-3.37	.17	14.7	43	47	7	2				
		7 47 9	14	-3.77	.06	16.7	51	25	8	2				
		7 45 9	9	-3.62	.09	25.0	40	20	5	1				
120	OR 0746-10	7 46 27	42	-10.39	.18	16.7	36	34			-5.59	1.61	C	01-177
		7 45 23	12	-11.26	.20	16.7	17	53	14	3				
		7 45 3	10	-10.82	.08	20.0	43	17	11	3				
		7 47 13	6	-11.32	.13	25.0	44	15	2	1				
121	OR 0751-11	7 51 4	18	-11.53	.12	16.7	50	40			.38	1.83	C	01-187
		7 51 34	69	-11.72	.87	12.6	4 75		3	1				
		7 50 34	17	-11.92	.15	16.7	31	43	7	2				
		7 49 49	36	-10.75	.49	20.0	32	16	7	2				
		7 51 24	19	-11.68	.06	25.0	32	38	4	1				
122	OR 0750-05	7 50 49	10	-5.60	.05	16.7	102	26			3.12	1.14	B	01-089
		7 51 20	26	-5.34	.24	12.6	150	25	11	3				
		7 51 30	17	-5.63	.08	14.7	191	31	17	3				
		7 50 40	14	-5.37	.05	16.7	162	20	17	3				
		7 49 16	45	-4.12	.23	20.0	24	31	10	2				
		7 49 35	31	-5.40	.34	25.0	31	23	6	2				
123	OR 0752-02	7 52 44	8	-2.44	.11	16.7	51	6			.27	.27	A	40-02.33
		7 52 8	13	-2.38	.16	12.6	36	36	16	2				
		7 52 48	13	-2.47	.11	14.7	32	28	23	2				
		7 52 38	6	-2.46	.10	16.7	32	15	25	2				
		7 52 58	5	-2.22	.02	20.0	47	12	26	2				
		7 52 29	8	-2.66	.02	25.0	47	18	18	2				
124	OR 0759-08	7 59 45	18	-8.31	.19	16.7	68	11			1.41	1.05	B	PERO800-09
		7 59 52	73	-9.51	.90	12.6	4 48		2	1				
		7 59 42	18	-8.79	.15	14.7	30	27	10	2				
		7 59 40	95	-9.12	.40	16.7	64	17	10	2				
		8 0 24	70	-9.43	.39	20.0	37	28	12	1				
125	OR 0801-11	8 1 40	9	-11.71	.12	16.7	37	19			1.70	.91	B	01-198
		8 1 34	25	-12.04	.75	12.6	64	33	8	2				
		8 1 43	11	-11.72	.17	16.7	34	21	12	3				
		8 1 23	23	-11.71	.61	20.0	48	15	11	2				
		8 1 43	14	-11.69	.17	25.0	22	28	5	2				
126	OR 0801-02	8 1 48	12	-3.94	.07	16.7	52	8			.78	.35	A	MEMOT-001
		8 1 39	11	-3.69	.06	12.6	68	27	18	2				
		8 1 29	12	-3.59	.06	14.7	68	23	24	2				
		8 1 29	8	-4.02	.04	16.7	47	19	22	2				
		8 1 31	17	-3.94	.13	20.0	43	12	32	3				
		8 2 19	8	-3.59	.02	25.0	42	18	10	1				

ORIGINAL COPY IN
OF POOR QUALITY

/20

NO.	SOURCE NAME	RA 1950 H M S	DEC. 1950 D M S	RRR. DMS	PHREQ. MHZ	FLUX F.U.	RRR. PC	N	NRA	SP. IND.	RRR. W	IDENTIFICATION RADIO OPTIC.
127	OR 0807-10	8 7 1	7	-10.15	.06	16.7	123	4		1.01	.16	A 3C195 0
		8 7 3	37	-10.58	.81	10.0	214	4	2			
		8 7 3	11	-10.82	.15	12.6	166	19	18			
		8 7 23	8	-10.25	.08	16.7	141	13	19			
		8 7 32	9	-9.94	.05	16.7	131	3	20			
		8 6 52	5	-10.03	.03	20.0	96	1	23			
		8 6 55	4	-10.22	.02	25.0	82	12	30			
128	OR 0810-05	8 10 10	12	-5.23	.09	16.7	65	14		2.08	.57	B 4C-05.29
		8 8 20	49	-5.19	.13	12.6	149	63	6			
		8 9 50	17	-4.99	.05	14.7	104	24	13			
		8 9 50	12	-5.44	.06	16.7	48	24	18			
		8 10 30	12	-5.41	.06	20.0	43	21	12			
		8 10 30	9	-5.21	.05	25.0	30	20	8			
129	OR 0813-02	8 13 33	7	-2.80	.03	16.7	155	4		.04	.20	A 3C196.1 0
		8 14 39	15	-3.04	.25	10.0	109	42	8			2=198
		8 13 59	6	-2.90	.03	12.6	156	15	32			
		8 13 58	7	-2.72	.01	14.7	170	13	32			
		8 13 39	3	-2.87	.01	16.7	151	11	34			
		8 13 19	3	-2.85	.01	20.0	154	11	24			
		8 13 28	7	-2.75	.01	25.0	149	16	25			
130	OR 0816-11	8 16 42	27	-11.61	.17							C PER0816-11
		8 17 3	26	-11.96	.58	12.6	4 75	4	2			
		8 16 13	63	-11.47	.74	14.7	4 35	2	1			
		8 16 30	87	-11.42	.24	20.0	30	27	6			
		8 15 48	53	-11.45	.20	25.0	30	21	9			
131	OR 0818-08	8 18 20	19	-8.84	.34	16.7	60	34		-13	1.73	C 0J-026
		8 17 41	27	-8.51	.30	14.7	46	57	6			
		8 18 2	16	-9.51	.11	16.7	64	26	4			
		8 18 41	13	-8.51	.08	20.0	60	21	8			
132	OR 0818-05	8 18 54	21	-5.70	.05	16.7	111	12		2.61	.62	C 4C-05.30
		8 19 30	12	-5.62	.06	14.7	160	17	6			
		8 17 30	63	-6.04	.66	16.7	4 58	2	1			
		8 18 20	14	-5.57	.13	20.0	59	24	4			
		8 18 40	17	-5.75	.04	25.0	47	34	5			
133	OR 0822-09	8 22 16	17	-9.25	.15	16.7	44	23		1.02	.93	B PER0822-09
		8 21 1	22	-8.10	.24	12.6	48	58	9			
		8 22 31	22	-8.54	.30	14.7	43	48	9			
		8 22 12	12	-8.53	.15	16.7	36	30	5			
		8 22 42	13	-9.36	.05	20.0	30	22	6			
		8 21 42	61	-8.70	.49	25.0	22	28	8			
134	OR 0825-06	8 25 41	14	-5.48	.09	16.7	55	12		.72	.51	B 4C-05.31
		8 24 0	20	-5.83	.13	12.6	95	35	8			
		8 24 16	38	-5.70	.62	14.7	55	31	11			
		8 25 0	10	-6.37	.06	16.7	48	11	13			
		8 25 0	12	-6.50	.05	20.0	47	21	14			
		8 24 10	12	-6.59	.04	25.0	46	23	3			

/21

19

ORIGINAL PAGE IS
OF POOR QUALITY

/22

NO.	SOURCE NAME	RA 1950 H M S	ERR. SEC.	D 1950 DMS.	MUR. DMS.	PRNG. MKS	PLUX F.U.	ERR. PC	N	NRA IND.	SP. IND.	ERR. IND.	W	IDENTIFICATION RADIO OPTIC.
144	GR 0851-03	8 51 15	14	-3.14	.08	16.7	53	18		1.38	.77	D		40-03.34 Q30
		8 50 29	42	-3.84	.47	12.6	76	7	2					
		8 49 19	37	-3.60	.13	14.7	37	67	7	2				
		8 50 23	78	-3.16	.10	16.7	65	30	17	2				
		8 51 18	9	-3.10	.04	20.0	37	17	10	2				
		8 51 28	13	-2.62	.30	25.0	34	27	4	1				
145	GR 0852-11	8 52 39	12	-11.65	.12	16.7	69	7		2.10	.35	D		QJ-187
		8 51 13	62	-11.83	.83	10.0	178	5	2					
		8 52 43	35	-11.83	.75	12.6	87	9	2					
		8 51 56	17	-11.47	.20	14.7	96	25	20	3				
		8 53 13	12	-12.20	.13	16.7	69	20	20	3				
		8 52 43	9	-11.98	.04	20.0	44	17	16	3				
		8 52 22	12	-11.44	.03	25.0	32	24	13	2				
146	GR 0853-05	8 53 39	15	-5.74	.07	16.7	90	21		.86	1.40	D		MSH08-013
		8 53 10	23	-5.62	.13	12.6	84	41	6	2				
		8 53 40	64	-5.62	.75	14.7	141	72	2	1				
		8 53 40	17	-5.80	.11	16.7	110	24	6	2				
		8 54 0	20	-5.75	.09	20.0	60	32	6	2				
147	GR 0855-03	8 55 5	12	-3.79	.12	16.7	47	17		1.04	.82	D		40-03.35 Q30
		8 55 18	15	-2.83	.21	14.7	52	25	14	2				
		8 54 49	11	-3.22	.25	16.7	42	20	8	1				
		8 55 29	12	-3.87	.04	20.0	49	20	14	2				
		8 54 49	13	-3.66	.08	25.0	25	27	6	2				
148	GR 0858-02	8 58 0	19	-2.15	.16	16.7	42	14		1.16	.39	C		40-02.37
		8 57 38	10	-2.92	.16	12.6	60	30	19	2				
		8 58 48	14	-1.93	.05	16.7	37	33	8	2				
		8 57 48	22	-2.27	.06	20.0	37	35	5	1				
		8 57 58	24	-2.60	.13	25.0	26	46	2	1				
149	GR 0900-12	9 0 24	74	-12.15	.29	16.7	60	21		.45	.71	C		OK-105
		9 2 57	121	-11.94	.54	14.7	82	51	5	1				
		9 0 55	79	-12.13	.29	16.7	52	26	6	1				
		8 59 52	114	-11.58	.31	20.0	68	31	9	2				
		8 58 5	103	-12.66	.27	25.0	49	20	9	2				
150	GR 0900-05	9 0 43	8	-3.08	.05	16.7	60	11		1.14	.48	A		40-04.29 Q30
		9 0 39	100	-5.32	1.08	10.0	110	48	2	1				
		8 59 49	28	-4.62	.15	12.6	85	48	8	2				
		9 1 9	10	-5.04	.04	14.7	86	18	16	2				
		9 0 49	5	-4.91	.04	16.7	46	16	21	3				
		9 0 29	6	-3.03	.02	20.0	51	13	24	3				
		9 0 2	49	-5.18	.02	25.0	39	18	21	3				
151	GR 0915-02	9 15 15	20	-2.40	.04	16.7	65	17		.43	.67	B		40-02.38 Q30 Z=1.203
		9 14 18	14	-2.31	.05	14.7	89	23	16	2				
		9 15 38	9	-2.23	.16	16.7	56	18	10	2				
		9 14 48	15	-2.52	.04	20.0	51	25	13	2				
		9 15 8	8	-2.38	.02	25.0	60	18	19	2				
152	GR 0915-11	9 15 41	6	-11.45	.12	16.7	2719	4		.97	.17	A		30218 Q3A Z=0.65
		9 15 21	11	-10.90	.08	12.6	3700	14	18	3				
		9 15 32	8	-10.88	.06	14.7	3000	13	24	3				
		9 15 32	3	-11.23	.04	16.7	2750	12	25	3				
		9 15 42	6	-11.42	.02	20.0	2150	14	29	3				
		9 15 32	4	-11.65	.02	25.0	1900	13	20	3				

ORIGINAL DOCUMENT
OF POOR QUALITY

/23

NO.	BOUNCE NAME	RA 1950 H M S	DEC. D M S	PER. D M S	PHAS. MIZ	FLUX F.U.	ERR. PC	H	NRA	SP. IND.	ERR. IND.	W	IDENTIFICATION RADIO OPTIC.
153	OR 0819-06	9 19 32	23	-6.17	.25	16.7	95	18		3.13	.76	B	40-06.22 QMO
		9 20 30	33	-6.16	.36	12.6	101	35	13	3			
		9 21 42	14	-5.49	.05	14.7	194	18	13	3			
		9 20 29	18	-5.74	.05	16.7	87	23	10	3			
		9 18 40	9	-6.42	.06	20.0	33	16	17	3			
		9 19 10	9	-6.65	.04	23.0	26	20	14	3			
154	OR 0921-03	9 21 18	26	-3.28	.06	16.7	60	12		1.14	.34	B	
		9 21 48	23	-2.69	.31	12.6	481	17	2				
		9 21 28	9	-3.26	.05	16.7	39	18	14	2			
		9 21 48	10	-3.20	.06	20.0	51	18	13	2			
		9 19 38	11	-3.36	.05	23.0	37	23	6	2			
155	OR 0925-03	9 25 33	7	-3.82	.02	16.7	47	10		1.74	.40	A	40-04.31
		9 35 18	28	-3.43	.17	12.6	80	25	9	2			
		9 35 28	10	-3.84	.05	14.7	50	25	16	2			
		9 35 18	12	-3.78	.03	16.7	51	24	16	2			
		9 35 28	6	-3.83	.02	20.0	37	14	18	2			
		9 35 48	7	-3.85	.03	23.0	22	16	12	2			
156	OR 0937-11	9 37 35	11	-11.17	.19	16.7	58	14		1.72	.62	B	3024
		9 37 51	21	-10.81	.58	12.6	87	23	10	2			
		9 37 31	18	-10.80	.30	14.7	60	25	16	2			
		9 37 25	10	-11.41	.17	16.7	69	17	19	2			
		9 38 15	76	-11.15	.18	23.0	25	27	9	2			
157	OR 0939-08	9 39 37	30	-8.11	.16	16.7	32	28		.68	1.43	C	PEROM-08 O
		9 39 0	28	-7.86	.11	14.7	89	40	4	1			
		9 39 0	17	-7.70	.13	16.7	32	40	4	1			
		9 40 30	21	-8.29	.06	20.0	29	40	4	1			
		9 39 50	33	-7.33	.36	23.0	24	63	2	1			
158	OR 0942-02	9 42 49	12	-2.84	.21	16.7	37	38		3.25	2.57	C	OK-070
		9 42 38	26	-2.24	.49	12.6	79	48	3	1			
		9 42 38	22	-2.96	.05	14.7	68	28	2	1			
		9 42 48	14	-2.09	.13	16.7	34	33	2	1			
159	OR 0943-12	9 43 43	22	-12.63	.14	16.7	52	30		1.06	1.46	C	MEMO9-111
		9 42 41	63	-12.21	.81	12.6	70	3	1				
		9 44 42	33	-12.88	.73	14.7	43	55	4	1			
		9 44 12	30	-12.59	.75	16.7	43	55	17	1			
		9 43 32	15	-12.62	.15	20.0	45	34	7	2			
		9 42 22	32	-12.76	.46	23.0	28	60	3	1			
160	OR 0946-05	9 46 22	19	-3.04	.09							C	40-05.38
		9 45 19	69	-5.21	.58	14.7	499	3	1				
		9 46 29	17	-5.24	.13	16.7	435	7	3				
		9 46 39	14	-4.98	.13	20.0	27	29	3	1			
		9 45 49	13	-4.98	.08	23.0	38	27	2	1			
161	OR 0947-07	9 47 1	20	-7.64	.21	16.7	38	9		-24	.36	C	MEMO9-11
		9 46 0	35	-7.75	.30	12.6	45	50	6	2			
		9 46 18	18	-8.13	.24	14.7	36	25	11	2			
		9 46 30	10	-8.50	.06	16.7	39	37	12	2			
		9 46 31	68	-7.88	.16	20.0	38	15	12	2			
		9 47 41	9	-7.49	.02	23.0	44	20	8	2			

ORIGINAL FILE OF POOR QUALITY

124

NO.	BOUNCE NAME	RA 1950 H M S	DEC. HR.	D 1950 DMS.	HRN. DMS.	PRNG. MIL.	PLAT F.U.	ERR. FC	N	MRA	SP. IND.	ERR. W	IDENTIFICATION RADIO OPTIC.
162	OR 0949-02	9 49 49	26	-2.64	.09	16.7	137	19			4.23	.09	B OK-081
		9 51 58	75	-2.23	.34	10.0	-132		4	1			
		9 51 48	21	-2.15	.23	12.6	-43		9	2			
		9 52 58	33	-1.80	.33	14.7	-38		8	2			
		9 50 16	14	-2.70	.06	16.7	162	23	5	1			
		9 48 28	11	-2.77	.06	20.0	51	20	5	2			
		9 50 8	14	-2.78	.09	23.0	51	29	2	1			
163	OR 0952-12	9 52 59	17	-12.48	.23	16.7	47	46			2.92	1.67	C MEM9-113
		9 54 11	33	-11.61	.75	14.7	-39		8	2			
		9 52 41	13	-11.72	.15	16.7	31	34	12	2			
		9 52 31	14	-12.54	.17	20.0	39	23	12	2			
		9 52 41	8	-12.70	.08	23.0	12	36	7	2			
164	OR 0953-07	9 53 3	16	-7.20	.06								B 40-06.24
		9 54 19	77	-7.12	.57	16.7	-39		6	2			
		9 54 20	47	-7.34	.16	20.0	30	36	8	2			
		9 52 59	8	-7.19	.03	23.0	41	19	6	2			
165	OR 0956-03	9 56 36	26	-3.16	.14								C 40-03.39 O
		9 57 18	18	-2.70	.32	14.7	-30		6	2			
		9 55 58	17	-2.59	.11	16.7	60	28	6	2			
		9 56 38	19	-2.59	.15	23.0	42	38	2	1			
166	OR 0957-05	9 57 57	13	-5.25	.12	16.7	34	23			1.37	1.00	B 40-03.40
		9 56 29	26	-4.96	.11	12.6	108	39	10	3			
		9 58 29	41	-4.69	.17	14.7	-49		9	2			
		9 58 9	7	-5.43	.06	16.7	42	19	16	3			
		9 57 59	18	-5.49	.02	20.0	85	20	18	3			
		9 57 59	11	-5.59	.03	23.0	28	23	16	3			
167	OR 1003-03	10 3 4	17	-3.07	.14	16.7	44	33			1.88	1.53	C 40-03.29
		10 3 28	65	-2.37	.73	14.7	-49		2	1			
		10 3 28	27	-2.83	.15	16.7	30	47	2	1			
		10 3 8	14	-3.19	.13	20.0	29	28	5	1			
		10 2 18	28	-3.21	.20	23.0	24	55	2	1			
168	OR 1005-10	10 5 28	8	-10.25	.12	16.7	120	11			.56	.50	B FEB1005-09 QED
		10 5 26	64	-10.29	.23	12.6	118	20	23	2			
		10 5 3	8	-9.95	.06	14.7	137	12	22	3			
		10 5 34	8	-11.00	.06	16.7	117	16	24	2			
		10 5 50	10	-10.33	.04	20.0	81	18	22	2			
		10 5 50	7	-10.18	.02	23.0	108	17	14	2			
169	OR 1007-03	10 7 42	11	-3.68	.05	16.7	44	10			1.75	.36	A 40-03.40 O
		10 7 58	63	-2.95	.72	10.0	-120		6	2			
		10 6 48	12	-7.59	.04	12.6	10	37	16	2			
		10 7 58	10	-3.62	.06	14.7	30	53	14	2			
		10 7 58	10	-3.60	.03	16.7	37	53	16	2			
		10 7 58	6	-3.81	.03	20.0	32	64	17	2			
		10 8 2	6	-5.63	.04	23.0	20	13	1	1			
170	OR 1008-07	10 8 36	11	-7.25	.03	16.7	53	16			-.23	.66	B FEB1007-07 QED
		10 8 39	7	-7.53	.11	14.7	39	20	6	1			
		10 7 49	12	-7.20	.11	16.7	30	23	2	1			
		10 8 39	9	-7.25	.04	20.0	49	17	6	2			
		10 8 49	8	-7.24	.02	23.0	67	19	6	2			

ORIGINAL PAGE IS
OF POOR QUALITY

125

NO.	BOUNCE NAME	RA 1950 H M S	DEC. D M S	PER. SEC.	D 1950 D M S	PER. SEC.	FRING. F.U.	FLUX F.U.	PER. PO	N	NRA	SP. IND.	PER. SEC.	V	IDENTIFICATION RADIO OPTIC.
171	OR 1011-07	10 17 36	20	-7.35	.08	16.7	80	18				8.50	.84	B	OL-087
		10 16 9	100	-7.69	.42	12.6	67	6	1						
		10 16 39	12	-7.26	.11	14.7	139	18	6	2					
		10 18 29	16	-7.69	.11	16.7	65	25	6	2					
		10 17 39	18	-7.31	.09	20.0	40	16	4	1					
		10 17 39	12	-7.28	.06	25.0	42	24	3	1					
172	OR 1021-11	10 21 32	15	-11.24	.13	16.7	98	7				.99	.23	B	MM10-108
		10 21 40	18	-11.61	.36	12.6	127	28	9	2					
		10 22 10	19	-10.82	.13	14.7	110	27	10	2					
		10 22 10	11	-11.36	.11	16.7	102	17	11	2					
		10 22 7	52	-12.29	.24	20.0	73	34	17	2					
		10 21 9	7	-11.80	.01	25.0	66	17	8	1					
173	OR 1027-08	10 27 4	16	-8.15	.15	16.7	70	30				.82	1.26	C	CC-043
		10 25 39	38	-8.73	.46	12.6	55	4	2						
		10 26 29	26	-8.25	.15	14.7	48	35	3	1					
		10 27 49	22	-9.04	.11	16.7	58	25	3	2					
		10 27 9	12	-8.76	.05	20.0	78	21	5	2					
		10 26 39	15	-8.02	.02	25.0	27	21	4	2					
174	OR 1028-06	10 28 26	16	-6.08	.13	16.7	50	10				.41	.69	B	40-09.43
		10 29 18	19	-5.98	.24	12.6	38	64	13	2					
		10 28 48	8	-5.41	.08	14.7	36	22	20	2					
		10 28 9	10	-6.18	.06	16.7	48	21	13	2					
		10 27 39	9	-6.15	.03	20.0	46	17	14	2					
175	OR 1029-11	10 29 43	29	-11.46	.18	16.7	50	34				2.00	1.63	C	PER1031-11
		10 30 40	19	-11.69	.36	16.7	28	30	6	2					
		10 28 40	28	-11.41	.36	20.0	26	57	3	1					
		10 29 30	13	-11.41	.20	25.0	13	34	3	1					
176	OR 1033-09	10 33 9	12	-9.68	.13	16.7	53	11				.02	.71	B	MM10-115
		10 33 29	14	-8.90	.36	12.6	60	45	11	2					
		10 33 9	18	-8.32	.17	14.7	54	28	13	2					
		10 32 39	12	-9.30	.09	16.7	48	24	7	2					
		10 33 9	10	-9.74	.03	20.0	54	18	4	1					
177	OR 1039-03	10 35 23	16	-5.30	.06	16.7	77	16				.01	1.16	C	40-09.44
		10 35 30	14	-5.30	.09	14.7	82	20	5	1					
		10 35 38	17	-5.40	.08	16.7	63	27	6	2					
		10 35 8	11	-5.56	.06	20.0	80	19	8	2					
178	OR 1038-11	10 38 1	15	-11.63	.15	16.7	100	39				3.85	1.63	C	MM10-117
		10 37 50	34	-11.35	.28	14.7	62	27	4	1					
		10 38 0	19	-11.88	.24	16.7	71	27	5	1					
		10 38 20	10	-11.64	.13	20.0	65	18	12	2					
		10 37 30	13	-11.41	.24	25.0	16	27	2	1					
179	OR 1040-02	10 40 3	38	-2.21	.06	16.7	56	28				.29	.81	C	OL-070
		10 38 38	17	-2.23	.17	12.6	70	47	4	1					
		10 38 37	15	-1.32	.11	14.7	72	47	3	1					
		10 38 28	19	-2.36	.17	16.7	77	49	3	1					
		10 39 8	22	-2.21	.03	20.0	51	49	2	1					
		10 41 38	17	-2.36	.11	25.0	50	27	2	1					

ORIGINAL PAGE IS
OF POOR QUALITY

126

NO.	REUNITE NAME	HA 1950 H M S	HRH. SEC.	D 1950 LMO.	HRH. LMO.	PRMO. MHR.	PLIX P.U.	HRH. PC	N	MRA	SP. LMO.	HRH. SEC.	V	IDENTIFICATION RADIO OPTIC.
180	OR 1046-10	10 46 7	26	-10.45	.21	16.7	65	16			1.06	.54	B	OL-179
		10 48 9	25	-10.74	.21	12.6	50	44	17	2				
		10 47 29	15	-11.41	.09	14.7	60	20	12	2				
		10 46 50	19	-10.97	.24	16.7	37	41	10	2				
		10 46 9	14	-10.61	.11	20.0	46	23	11	2				
		10 45 29	6	-10.73	.04	23.0	44	14	8	2				
181	OR 1046-05	10 46 27	11	-5.39	.21	16.7	119	14			.60	.63	B	40-03.45
		10 45 48	34	-5.89	.13	12.6	166	43	3	1				
		10 46 38	17	-5.68	.06	14.7	144	22	10	2				
		10 46 28	14	-4.36	.06	16.7	99	20	7	2				
		10 46 18	13	-5.37	.03	23.0	102	26	2	1				
182	OR 1047-07	10 47 9	10	-2.14	.06	16.7	38	18			.47	.69	B	40-02.43
		10 46 47	22	-2.20	.29	12.6	50	46	9	2				
		10 46 57	9	-2.37	.12	16.7	41	27	20	2				
		10 47 28	8	-2.58	.17	20.0	29	21	12	2				
		10 46 57	11	-2.11	.09	23.0	35	23	8	2				
183	OR 1048-08	10 48 40	16	-8.74	.14	16.7	66	16			2.49	.60	B	30246 QRO Z=344
		10 49 49	18	-7.91	.20	12.6	105	30	15	2				
		10 48 29	20	-7.80	.06	16.7	79	27	14	2				
		10 48 29	8	-8.74	.02	20.0	48	16	12	2				
		10 48 39	9	-8.84	.02	23.0	21	53	5	2				
184	OR 1101-10	11 1 18	32	-10.70	.21	16.7	84	20			1.03	.62	B	OL-198
		11 1 20	149	-10.76	.17	12.6	101	42	8	2				
		11 1 3	80	-10.04	.17	14.7	137	27	8	1				
		11 0 30	109	-10.47	.14	16.7	64	29	15	2				
		11 1 27	67	-10.44	.04	20.0	34	20	12	2				
		11 1 29	32	-10.75	.04	23.0	61	16	4	1				
185	OR 1103-08	11 3 38	14	-8.10	.13	16.7	47	16			1.33	.90	B	MIN11-002
		11 3 8	21	-9.11	.09	12.6	71	42	9	2				
		11 4 4	24	-8.36	.24	14.7	89	34	9	2				
		11 3 28	16	-8.21	.13	16.7	89	20	6	1				
		11 3 48	13	-8.03	.02	23.0	28	76	5	2				
186	OR 1105-03	11 5 32	11	-3.02	.06	16.7	21	34			.57	.99	B	40-02.45
		11 4 48	22	-3.28	.75	12.6	41		2	1				
		11 5 17	23	-3.04	.17	16.7	26	63	4	1				
		11 5 47	9	-3.03	.08	20.0	18	28	6	2				
		11 5 17	10	-2.98	.11	23.0	17	21	2	1				
187	OR 1107-10	11 7 19	80	-10.40	.17	16.7	42	24			.42	.22	B	OR-013
		11 7 29	29	-10.73	.29	12.6	62	60	6	2				
		11 5 39	27	-11.83	.28	14.7	62	33	2	1				
		11 8 9	16	-10.69	.24	16.7	22	27	11	2				
		11 6 39	34	-10.56	.13	20.0	35	83	9	2				
		11 7 28	10	-10.10	.13	23.0	58	22	8	2				
188	OR 1107-08	11 7 48	13	-8.39	.14	16.7	38	36			2.54	1.67	C	OR-012
		11 7 38	15	-8.84	.13	16.7	29	24	7	2				
		11 7 58	38	-8.97	.21	20.0	22	16	5	1				
		11 7 58	38	-8.97	.21	23.0	12	16	5	1				

127

25

ORIGINAL PAGE
OF POOR QUALITY

/28

NO.	SOURCE NAME	RA 1950 H M S	DEC. S M S	D 1950 D M S	HR. D M S	PKNO. MMZ.	FLUX F.U.	HR. PO	M	MRA	SP. IND.	HR. W	IDENTIFICATION RADIO OPTIC.	
198	OR 1132-51	11 32 27	35	-11.20	.25	16.7	42	16			.45	.79	C	OM-227 OM-134
		11 32 8	16	-10.13	.46	14.7	49	34	2	1				
		11 34 38	12	-10.32	.20	16.7	31	28	1	1				
		11 33 38	17.4	-11.39	.30	20.0	43	27	3	1				
		11 31 38	18	-11.40	.24	25.0	33	26	3	1				
199	OR 1134-02	11 34 24	18	-2.07	.05	16.7	35	20			.79	.77	B	4C-02.04
		11 34 36	8	-2.93	.11	16.7	34	23	15	2				
		11 33 37	7	-2.93	.05	20.0	31	17	12	2				
		11 34 27	9	-2.82	.04	25.0	35	20	9	2				
200	OR 1135-13	11 35 32	12	-13.05	.10	16.7	75	11			2.72	.48	B	PKB1135-13 QM Z=334
		11 36 16	14	-13.88	.24	12.6	97	25	15	2				
		11 34 36	9	-13.35	.11	14.7	117	15	18	2				
		11 34 38	7	-13.28	.06	16.7	89	17	24	2				
		11 35 48	5	-12.34	.05	23.0	43	13	23	2				
		11 35 38	5	-12.90	.05	25.0	24	13	22	2				
201	OR 1137-09	11 37 25	11	-9.11	.04	16.7	40	53			-1.31	2.80	B	OM-067
		11 37 38	30	-8.77	.30	14.7	52	6	2					
		11 37 28	16	-9.21	.08	16.7	30	42	8	2				
		11 37 17	18	-9.10	.03	20.0	64	89	10	2				
		11 37 18	38	-9.82	.58	25.0	26	72	2	1				
202	OR 1144-07	11 44 38	17	-7.41	.16	16.7	50	27			-0.57	1.13	C	OM-074
		11 44 37	14	-7.70	.08	14.7	52	29	13	2				
		11 44 37	17	-7.00	.15	16.7	58	37	4	1				
		11 44 7	18	-7.31	.06	25.0	66	35	2	1				
203	OR 1146-11	11 46 24	8	-11.23	.11	16.7	65	9			1.99	.41	B	PKB1146-11 QM
		11 44 37	37	-10.76	.80	10.0	116	23	14	2				
		11 46 27	12	-11.17	.20	12.6	100	23	14	2				
		11 46 17	11	-10.88	.09	14.7	107	18	23	2				
		11 46 27	7	-11.11	.06	16.7	52	16	26	2				
		11 46 47	6	-11.13	.04	20.0	49	14	30	2				
		11 46 36	39	-11.30	.04	25.0	28	17	28	2				
204	OR 1146-03	11 46 32	16	-3.86	.06	16.7	33	22			.59	1.33	B	PKB1146-03 QM Z=341
		11 48 27	37	-3.49	.45	12.6	55	8	2					
		11 47 17	23	-3.77	.13	14.7	42	31	9	2				
		11 47 17	15	-3.89	.11	16.7	27	44	7	2				
		11 46 37	8	-3.88	.06	20.0	30	18	4	1				
205	OR 1149-05	11 49 37	23	-5.14	.08	16.7	63	15			.43	.62	B	PKB1150-04
		11 48 8	20	-4.93	.23	14.7	72	34	11	2				
		11 49 27	26	-4.87	.13	15.7	64	39	5	1				
		11 50 7	10	-4.99	.04	20.0	55	18	9	2				
		11 49 27	13	-5.24	.03	25.0	57	27	6	2				
206	OR 1154-04	11 54 7	16	-4.70	.12	16.7	78	26			2.57	1.81	C	OM-091
		11 53 7	62	-5.26	.75	14.7	72	30	2	1				
		11 53 37	22	-4.38	.13	16.7	88	30	3	1				
		11 53 37	16	-4.65	.08	20.0	44	27	3	1				
		11 54 37	20	-5.13	.17	25.0	39	40	3	1				

ORIGINAL PAGE IS
OF POOR QUALITY

29

NO.	BOUNCE NAME	RA 1950 H M S	DEC. D M S	RA 1950 H M S	DEC. D M S	PRG. MKS	FLUX F.U.	SR. PC	N	KRA	SP. IND.	SR. IND.	V	IDENTIFICATION RADIO OPTIC.
207	OR 1800-10	12 0 18	28	-10.82	.13	16.7	44	16			2.43	.67	B	PKB1159-10 Q B=266
		12 0 17	17	-11.20	.46	12.6	62	40	14	2				
		12 0 17	25	-11.33	.15	16.7	60	44	9	1				
		12 1 7	9	-11.02	.04	16.7	34	18	17	2				
		11 59 7	10	-10.41	.13	20.0	80	28	12	2				
		11 59 57	11	-10.63	.06	23.0	17	22	7	2				
208	OR 1802-04	12 2 3	13	-4.00	.13	16.7	53	9			1.77	.52	B	40-04.40 Q
		12 2 9	71	-3.84	.29	12.6	63	34	13	2				
		12 2 11	69	-3.28	.71	16.7	72	34	19	2				
		12 2 5	27	-4.08	.19	16.7	50	17	22	2				
		12 1 47	28	-3.86	.11	20.0	41	19	21	2				
		12 2 7	17	-4.23	.19	23.0	24	34	10	2				
209	OR 1803-11	12 3 48	28	-11.84	.17	16.7	46	16			1.39	.61	C	PKB1804-12 QED
		12 4 7	13	-12.30	.30	16.7	54	31	11	1				
		12 3 17	19	-12.62	.36	16.7	53	31	6	2				
		12 3 27	14	-12.26	.11	20.0	38	23	12	2				
		12 2 57	15	-11.68	.06	23.0	23	20	5	2				
210	OR 1804-08	12 4 15	11	-8.19	.13	16.7	72	19			3.23	.71	B	PKB18-004 PKB18-002
		12 4 27	15	-8.03	.17	12.6	128	24	9	2				
		12 4 27	12	-7.73	.08	16.7	180	18	13	2				
		12 3 47	12	-7.92	.06	16.7	82	21	13	2				
		12 4 27	12	-8.17	.03	20.0	72	21	10	2				
		12 4 7	7	-8.38	.03	23.0	16	16	8	2				
211	OR 1806-10	12 6 50	19	-10.03	.12	16.7	32	31			.45	.93	B	PKB18-005
		12 9 7	41	-10.39	.38	16.7	44	35	5	2				
		12 8 26	43	-9.87	.32	16.7	39	35	11	2				
		12 8 18	30	-9.88	.32	20.0	23	31	10	1				
		12 9 5	21	-10.05	.11	23.0	28	18	12	2				
212	OR 1213-05	12 13 33	15	-5.68	.07	16.7	50	19			2.30	.75	B	OR-081 OR-083
		12 13 7	34	-5.92	.46	12.6	71	28	10	2				
		12 13 57	17	-5.38	.03	16.7	79	28	14	2				
		12 13 47	12	-5.23	.09	16.7	31	32	13	2				
		12 16 0	16	-5.82	.08	20.0	39	24	12	2				
		12 12 57	11	-5.63	.11	23.0	19	23	2	1				
213	OR 1214-03	12 14 36	13	-3.17	.03	16.7	62	16			1.43	.83	B	40-03.32
		12 14 17	34	-3.46	.24	12.6	82	22	7	2				
		12 13 57	12	-3.21	.23	16.7	77	22	10	2				
		12 14 27	11	-3.26	.04	16.7	60	19	10	2				
		12 14 47	10	-3.10	.03	20.0	38	19	10	2				
		12 15 37	19	-3.17	.06	23.0	55	37	7	2				
214	OR 1216-09	12 16 21	21	-9.77	.17	16.7	69	11			1.58	.50	B	PKB1216-10 Q B=264
		12 15 47	63	-9.91	.79	12.6	47	3	1	2				
		12 16 21	23	-9.71	.45	16.7	42	22	19	2				
		12 15 23	34	-9.49	.17	16.7	62	22	19	2				
		12 16 14	18	-9.71	.11	20.0	51	14	24	2				
		12 17 13	40	-10.30	.18	23.0	53	23	21	2				

ORIGINAL
OF POOR QUALITY

130

NO.	SOURCE NAME	HA 1950 H M S	27H. SEC.	D 1950 MO.	19H. DNI.	PRMO. MHz	PLUX F.U.	ERR. PC	N	MRA	SP. IND.	ERR. W	IDENTIFICATION RADIO OPTIC.
215	OR 1216-04	12 16 40	10	-4.87	.10	16.7	25	63			-32	3.04	O 40-04.42 QGA
		12 16 47	20	-4.81	.20	16.7	21	66	6	1			
		12 16 37	11	-4.88	.11	20.0	27	24	8	1			
		12 16 57	37	-4.98	.46	25.0	24	70	2	1			
216	OR 1222-10	12 22 34	11	-10.49	.06	16.7	49	28			.62	.88	D PKS1221-10
		12 22 26	45	-10.64	.75	12.6	-115		7	2			
		12 22 16	25	-10.87	.46	14.7	70	40	7	2			
		12 22 56	13	-10.67	.15	20.0	36	22	9	2			
		12 22 26	9	-10.69	.06	25.0	41	19	2	1			
217	OR 1224-08	12 24 22	19	-8.24	.07	16.7	79	19			2.62	.85	B PKS1225-08 QSO
		12 23 56	44	-8.64	.75	12.6	-102		6	2			
		12 22 56	14	-8.55	.17	14.7	67	27	9	2			
		12 23 56	9	-8.15	.06	16.7	84	15	15	2			
		12 24 36	8	-8.34	.04	20.0	64	16	12	2			
		12 24 56	8	-8.09	.05	25.0	22	18	6	2			
218	OR 1225-02	12 25 1	24	-2.99	.03	16.7	84	21			2.42	1.49	C 40-02.54 QSO
		12 24 57	32	-3.09	.13	10.0	147	60	8	2			
		12 25 21	7	-2.99	.03	16.7	93	14	11	1			
		12 24 17	9	-2.93	.22	20.0	48	17	8	1			
219	OR 1227-10	12 27 38	11	-10.22	.10	16.7	89	27			-51	1.05	C ON-144
		12 27 56	23	-10.85	.46	14.7	96	32	9	2			
		12 27 36	10	-10.81	.09	20.0	88	14	3	1			
		12 27 16	40	-10.17	.03	25.0	124	26	12	2			
220	OR 1228-02	12 28 41	48	-2.14	.12	16.7	100	13			1.71	.80	B 40-02.55 QSO
		12 27 37	9	-3.15	.15	12.6	126	18	21	2			2-1.038
		12 26 48	8	-2.61	.13	14.7	146	14	21	2			
		12 28 57	9	-2.20	.06	16.7	116	15	9	1			
		12 30 7	6	-2.06	.03	20.0	65	14	13	2			
221	OR 1227-04	12 27 5	34	-4.69	.14	16.7	89	9			1.17	.57	B ON-047
		12 27 27	19	-5.08	.20	12.6	130	29	11	2			
		12 26 47	8	-5.03	.06	14.7	87	16	19	2			
		12 26 17	6	-4.51	.03	16.7	101	13	11	2			
		12 29 11	9	-5.15	.30	20.0	74	11	12	2			
		12 29 1	72	-5.24	.08	25.0	42	35	7	1			
222	OR 1229-10	12 29 57	38	-10.31	.05	16.7	88	30			1.41	1.64	C PKS1230-10
		12 29 16	8	-10.28	.15	16.7	95	14	4	2			
		12 31 16	15	-10.29	.20	20.0	46	24	5	1			
		12 30 56	14	-10.32	.06	25.0	64	28	5	1			
223	OR 1231-07	12 31 47	25	-7.77	.18	16.7	64	15			.89	.89	C ON-050.4
		12 32 16	18	-7.55	.36	12.6	84	34	4	1			
		12 30 26	18	-8.73	.24	14.7	49	40	7	2			
		12 32 36	17	-8.24	.15	16.7	77	24	5	1			
		12 31 46	11	-7.64	.04	20.0	52	19	9	2			

ORIGINAL PAGE IS
OF POOR QUALITY

131

NO.	SOURCE NAME	RA 1950 H M S	DEC. S M S	D 1950 D M O	DMO D M O	PHOQ. PHZ	FLUX P.U.	DMR. FC	N	NRA	SP. IND.	DMR. V	W	IDENTIFICATION RADIO OPTIC.
224	OR 1239-12	12 39 0	34	-12.06	.21	16.7	11	118			-4.56	2.64	C	CU1237-11 0
		12 37 6	20	-11.60	.30	16.7	23	62	8	2				
		12 37 46	13	-11.67	.20	20.0	15	43	5	2				
		12 39 26	6	-12.74	.11	25.0	72	15	4	1				
225	OR 1240-06	12 40 39	19	-6.07	.13	16.7	36	39			-0.02	1.34	C	4C-05.52
		12 39 44	62	-6.95	.75	14.7	42	45	2	1				
		12 40 56	24	-6.37	.30	16.7	43	45	3	1				
		12 40 6	23	-6.61	.30	20.0	27	45	3	1				
		12 40 36	19	-6.00	.09	25.0	40	37	2	1				
226	OR 1242-02	12 42 26	11	-2.88	.08	16.7	20	40			-0.02	1.16	C	4C-02.56
		12 42 47	10	-2.88	.13	16.7	23	37	8	2				
		12 42 17	11	-2.78	.08	20.0	17	34	6	2				
		12 42 17	8	-2.97	.09	25.0	21	18	2	1				
227	OR 1244-11	12 44 1	15	-11.01	.09	16.7	72	21			3.61	.76	B	PKS1244-11
		12 43 56	42	-11.09	.73	12.6	88	22	6	2				
		12 42 46	17	-10.63	.20	14.7	167	22	4	2				
		12 43 16	11	-11.05	.09	16.7	54	21	14	2				
		12 44 16	8	-11.05	.11	20.0	29	19	13	2				
		12 44 16	6	-11.15	.09	25.0	19	15	11	2				
228	OR 1247-05	12 47 13	21	-5.43	.12	16.7	64	14			3.05	.63	B	4C-05.53
		12 46 46	24	-5.46	.36	12.6	110	57	2	1				
		12 47 15	19	-5.20	.05	14.7	102	28	9	2				
		12 46 46	17	-5.42	.03	16.7	87	24	15	2				
		12 47 46	8	-5.89	.06	20.0	53	16	16	2				
		12 46 6	13	-4.96	.08	25.0	20	37	2	1				
229	OR 1249-03	12 49 20	8	-3.13	.27	16.7	28	15			2.64	.69	C	ON-081 ON-082
		12 49 47	38	-2.59	.24	10.0	130	69	4	1				
		12 49 7	22	-2.63	.37	12.6	47	60	9	1				
		12 49 7	14	-2.35	.18	14.7	37	40	11	2				
		12 49 24	13	-3.33	.24	16.7	31	9	2					
		12 49 27	11	-3.54	.11	20.0	18	32	8	2				
230	OR 1251-11	12 51 51	13	-11.59	.08	16.7	226	8			.52	.31	B	3C278 0 Z=0.014
		12 50 55	11	-11.29	.13	12.6	242	34	6	2				
		12 51 25	13	-11.37	.08	14.7	255	26	6	2				
		12 51 35	8	-11.33	.05	16.7	231	21	7	3				
		12 52 5	6	-11.87	.03	20.0	200	30	8	2				
		12 52 15	7	-11.63	.01	25.0	185	24	6	2				
231	OR 1253-08	12 53 33	32	-8.62	.30	16.7	46	25			1.66	1.19	C	PKS1254-08 0
		12 50 26	29	-8.93	.58	12.6	70	55	5	2				
		12 52 16	35	-9.88	.20	14.7	52	66	3	1				
		12 53 26	23	-8.90	.24	16.7	32	52	4	1				
		12 54 6	9	-8.42	.09	20.0	37	17	6	2				
		12 52 26	24	-7.46	.30	25.0	18	46	2	1				
232	OR 1254-05	12 54 18	9	-5.42	.06	16.7	65	14			.57	.58	A	3C279 Q80 Z=0.536
		12 54 46	13	-5.07	.11	12.6	39	35	19	2				
		12 54 56	9	-5.06	.05	14.7	88	17	20	2				
		12 54 16	5	-5.21	.04	16.7	50	15	21	2				
		12 54 6	7	-5.34	.01	20.0	69	15	23	2				
		12 54 6	6	-5.73	.01	25.0	49	15	26	2				

ORIGINAL PAGE IS
OF POOR QUALITY

/32

NO.	SOURCE NAME	RA 1950 H M S	DEC. D M S	D 1950 LMQ.	RMN. LMQ.	PLMX. MCZ	PLMX F.U.	ENR. FC	N	MRA	MP. IND.	ENR. V	IDENTIFICATION RADIO OPTIC.
233	GR 1258-02	12 38 6	14	-7.71	.10	16.7	45	18		2.08	1.03	B	ON-094.1
		12 37 27	24	-7.33	.09	12.6	44	68	8	2			
		12 38 37	19	-7.79	.03	16.7	67	32	11	2			
		12 38 27	17	-7.68	.12	16.7	33		6	1			
		12 37 57	10	-7.49	.09	20.0	30	21	4	1			
234	GR 1258-07	12 38 17	15	-7.88	.17	16.7	33	22		.10	.75	C	ON-094.4
		12 38 56	27	-7.39	.11	12.6	69	54	5	2			
		12 38 36	19	-8.13	.20	14.7	32	53	9	2			
		12 38 16	12	-8.12	.11	16.7	32	31	10	2			
		12 38 56	14	-8.33	.13	20.0	24	32	5	2			
		12 37 46	10	-7.82	.09	25.0	38	21	2	1			
235	GR 1303-11	13 3 24	13	-11.44	.32	16.7	34	18		-1.56	.67	C	OP-104
		13 3 14	39	-11.22	.35	12.6	63	62	4	1			
		13 3 4	16	-11.30	.13	16.7	23	38	7	2			
		13 3 53	11	-12.29	.09	20.0	66	19	4	1			
		13 3 15	10	-10.91	.06	25.0	66	22	5	1			
236	GR 1305-09	13 5 24	24	-9.34	.17	16.7	38	37		1.01	1.34	C	PM1306-09
		13 5 3	21	-9.72	.36	12.6	478		7	2			
		13 4 55	14	-9.66	.15	16.7	39	46	7	2			
		13 5 49	34	-9.01	.54	20.0	34	20	10	2			
		13 6 25	19	-9.26	.24	25.0	32	36	4	1			
237	GR 1308-02	13 8 11	14	-2.53	.10	16.7	27	23		.35	.71	B	4C-02.57
		13 6 57	26	-2.20	.35	12.6	46		6	1			
		13 7 37	18	-2.64	.15	14.7	30		10	2			
		13 7 57	15	-2.42	.09	16.7	23	48	3	1			
		13 8 26	12	-2.77	.06	20.0	26	26	7	2			
		13 8 27	10	-2.35	.06	25.0	21	21	4	1			
238	GR 1309-11	13 9 14	16	-11.82	.10							B	OP-115
		13 10 55	39	-12.32	.38	12.6	498		7	2			
		13 9 19	18	-12.06	.30	16.7	431		9	2			
		13 8 45	12	-11.45	.20	20.0	44	21	7	2			
		13 9 25	9	-11.64	.06	25.0	67	20	10	1			
239	GR 1310-04	13 10 54	33	-4.45	.18							C	4C-04.46 4C-03.48
		13 11 6	32	-4.38	.20	14.7	36		9	2			
		13 9 45	27	-4.32	.17	16.7	28	23	15	2			
		13 11 10	62	-4.60	.25	20.0	29	19	14	2			
240	GR 1313-11	13 13 12	11	-11.89	.27	16.7	68	46		2.35	1.40	C	PM1313-12 PM1311-12
		13 12 5	35	-12.18	.64	14.7	47		8	2			
		13 13 25	16	-11.32	.20	16.7	42	37	6	1			
		13 13 39	12	-11.56	.06	20.0	36	27	6	1			
		13 13 4	7	-12.34	.08	25.0	19	16	2	1			
241	GR 1316-03	13 19 36	30	-5.70	.10	16.7	116	15		2.10	1.33	B	4C-05.57
		13 18 36	34	-5.85	.46	12.6	32		10	2			
		13 20 26	17	-5.82	.17	14.7	165	21	10	2			
		13 18 42	17	-5.62	.03	16.7	97	23	14	2			
		13 20 6	22	-6.02	.06	20.0	95	35	10	2			

ORIGINAL PAGE IS
OF POOR QUALITY

/33

NO.	SOURCE NAME	RA 1950 H M S	DEC. D M S	D 1950 LMJ.	RMJ.	PRGQ. M2.	PLUX F.U.	MR.	N	MRA	SP. IND.	MR.	W	IDENTIFICATION RADIO OPTIC.
242	OR 1321-07	13 21 49	11	-7.96	.07	16.7	61	26			.63	1.18	B	OP-035 OP-038
		13 21 55 21		-7.92	.11	16.7	33	37	10	2				
		13 21 55 17		-8.37	.11	16.7	69	24	8	2				
		13 21 55 16		-8.03	.04	10.0	64	24	7	2				
		13 22 5 17		-7.91	.03	23.0	39	34	4	2				
243	OR 1322-10	13 22 3	17	-10.85	.07	16.7	60	29			.79	1.05	B	FKB1321-105 QED
		13 21 43 22		-11.04	.38	12.6	112	34	10	2				
		13 21 35 29		-10.61	.46	14.7	47							
		13 21 47 68		-10.76	.49	16.7	32	33	7	1				
		13 20 49 38		-11.24	.30	20.0	31	26	11	2				
		13 22 25 13		-10.84	.06	23.0	69	26	2	1				
244	OR 1323-02	13 23 17	6	-2.04	.04	16.7	56	11			.84	.61	A	40-01.29 Q
		13 23 47 13		-1.72	.15	10.0	161		6	1				
		13 23 27 20		-2.01	.06	12.6	77	40	14	2				
		13 23 27 4		-1.84	.03	14.7	47	19	12	1				
		13 23 7 9		-1.92	.02	16.7	69	16	15	2				
		13 23 7 4		-2.09	.01	20.0	30	12	16	2				
		13 24 36 14		-2.34	.06	23.0	50	29	5	2				
245	OR 1328-05	13 28 55	13	-5.33	.03	16.7	42	10			.73	.41	A	FKB1328-09 QED
		13 28 6 64		-5.94	.36	10.0	126		3	1				
		13 29 8 137		-5.41	.44	12.6	63	66	8	2				
		13 27 56 13		-5.91	.24	14.7	56	31	10	2				
		13 28 46 9		-5.66	.08	16.7	34	23	13	2				
		13 29 8 48		-5.45	.16	20.0	37	12	22	2				
		13 29 26 9		-5.32	.02	23.0	32	19	11	2				
246	OR 1331-10	13 31 33	19	-10.09	.06	16.7	89	10			.97	.36	A	FKB1331-09 Q B=0.01
		13 31 11 38		-9.47	.27	12.6	82	31	20	2				
		13 31 43 44		-9.70	.26	14.7	113	14	31	2				
		13 31 30 42		-10.29	.30	16.7	30	13	28	2				
		13 31 46 40		-10.09	.31	20.0	56	27	23	2				
		13 31 28 34		-10.10	.04	23.0	65	26	22	2				
247	OR 1336-05	13 36 13	6	-5.97	.05	16.7	91	9			1.43	.37	A	40-06.39 QED B=0.025
		13 36 56 34		-5.67	.46	10.0	244		8	2				
		13 36 36 8		-5.22	.24	12.6	110	22	24	2				
		13 36 45 11		-5.80	.03	14.7	111	18	29	2				
		13 36 15 6		-6.01	.03	16.7	91	12	28	2				
		13 36 28 8		-5.75	.02	20.0	94	16	31	2				
		13 36 5 3		-6.04	.01	23.0	43	12	27	2				
248	OR 1342-02	13 42 59	23	-2.60	.07	16.7	29	21			-1.71	1.28	B	40-07.38
		13 42 6 21		-2.55	.17	12.6	69		5	1				
		13 42 16 19		-2.59	.03	14.7	27	47	1	1				
		13 42 26 12		-2.71	.06	16.7	28	34	6	1				
		13 43 34 9		-2.63	.03	20.0	60	17	8	1				
249	OR 1346-10	13 46 16	17	-10.89	.15	16.7	36	26			1.38	.68	B	FKB1346-10
		13 43 24 14		-11.68	.17	16.7	34	39	10	2				
		13 44 34 8		-10.80	.09	20.0	27	38	11	2				
		13 44 14 8		-10.70	.05	23.0	28	19	10	2				

ORIGINAL POLAR
OF POOR QUALITY

134

NO.	BOUNCE NAME	RA 1950 H M S	DEC. S M S	D 1950 D M S	MR. IND.	PRMO. MRZ	PLIN. P.U.	ERM. PC	M	MRA	SP. IND.	MR.	W	IDENTIFICATION RADIO OPTIC.
250	OR 1344-07	13 44 25	9	-7.68	.13	16.7	67	19			1.64	.97	B	PKD1344-07
		13 44 35	26	-7.47	.05	14.7	119	34	8	2				
		13 44 35	10	-7.69	.09	16.7	37	21	11	2				
		13 44 3	40	-8.71	.13	20.0	47	25	12	2				
		13 44 25	17	-7.70	.03	25.0	40	33	7	2				
251	OR 1348-11	13 48 38	28	-11.23	.26	16.7	150	36			4.96	1.21	C	OP-178
		13 48 14	15	-10.80	.06	16.7	135	21	6	2				
		13 47 34	19	-11.33	.05	20.0	93	31	11	2				
		13 48 16	24	-11.32	.34	25.0	19	18	8	2				
252	OR 1349-05	13 49 43	15	-5.32	.04	16.7	29	14			.47	.42	B	4C-05.39
		13 51 15	30	-5.19	.30	12.6	4	69	8	2				
		13 51 19	22	-5.17	.30	14.7	4	44	18	2				
		13 50 35	9	-5.61	.08	16.7	27	30	16	2				
		13 49 55	8	-5.49	.05	20.0	27	18	15	2				
		13 49 25	4	-5.53	.04	25.0	22	12	9	2				
253	OR 1352-09	13 52 42	26	-9.12	.04	16.7	48	20			-1.15	1.16	B	OP-088.6 +OP-091
		13 52 4	22	-8.92	.46	12.6	36	32	5	1				
		13 51 34	20	-8.85	.36	14.7	4	48	7	2				
		13 53 24	17	-9.11	.11	16.7	37	38	4	2				
		13 53 4	15	-9.13	.04	20.0	32	25	7	2				
254	OR 1359-06	13 59 7	24	-6.31	.09	16.7	18	26			-2.55	.92	G	4C-06.36
		13 58 35	102	-6.33	.80	10.0	128		2	1				
		13 59 5	43	-5.79	.58	12.6	4	58	7	2				
		13 58 5	15	-6.35	.20	16.7	17	62	6	2				
		13 59 55	13	-6.31	.15	20.0	29	26	3	1				
		13 59 5	16	-6.31	.11	25.0	30	32	2	1				
255	OR 1404-11	14 4 41	12	-11.11	.15								C	OQ-107
		14 4 33	13	-11.43	.36	16.7	4	23	4	1				
		14 4 43	16	-10.98	.30	20.0	26	34	4	1				
		14 4 23	15	-11.09	.15	25.0	37	30	3	1				
256	OR 1405-09	14 5 30	15	-9.04	.18	16.7	45	27			1.15	1.44	C	MSH14-004
		14 5 14	30	-9.33	.46	12.6	76	55	5	1				
		14 5 44	24	-9.88	.24	14.7	4	50	4	1				
		14 5 24	20	-9.12	.24	16.7	26	56	4	1				
		14 5 52	58	-9.08	.68	20.0	39	28	5	1				
257	OR 1411-05	14 11 30	7	-5.44	.05	16.7	67	5			0.10	.23	A	4C-05.60
		14 10 35	44	-5.48	.46	10.0	130		7	2				
		14 10 55	9	-5.22	.06	12.6	87	16	23	2				
		14 11 25	6	-5.35	.04	14.7	71	16	30	2				
		14 11 15	6	-5.36	.03	16.7	77	13	28	2				
		14 11 45	4	-5.66	.02	20.0	53	12	26	2				
		14 11 35	6	-5.40	.01	25.0	41	14	29	2				
258	OR 1414-03	14 14 56	7	-3.83	.03	16.7	68	16			1.73	.80	A	3C297
		14 14 26	19	-3.74	.15	12.6	4	61	12	1				
		14 14 46	10	-3.72	.04	14.7	61	22	11	1				
		14 14 56	10	-3.77	.03	16.7	76	16	10	1				
		14 15 6	7	-3.88	.02	20.0	58	14	11	1				
		14 14 56	11	-3.83	.03	25.0	25	23	9	1				

/35

33

ORIGINAL PAGE 13
OF POOR QUALITY

/36

NO.	SOURCE NAME	RA 1950 H M S	DEC. D M S	D 1950 D M S	RA 1950 H M S	DEC. D M S	FLUX F.U.	ERR. PC	N	NRA	SP. IND.	ERR. IND.	W	IDENTIFICATION RADIO OPTIC.
268	OR 1452-03	14 52 47	7	-3.98	.04	16.7	61	15			.48	.88	B	3C306.1 0
		14 52 25	36	-3.83	.46	10.0	145		4	1				Z=1.442
		14 52 45	25	-4.30	.17	12.6	61	33	6	1				
		14 52 25	11	-3.71	.11	14.7	37	22	5	1				
		14 52 25	10	-4.10	.05	16.7	68	17	6	1				
		14 52 45	4	-3.96	.02	20.0	60	12	8	1				
		14 52 45	18	-4.27	.17	25.0	28	36	8	1				
269	OR 1453-10	14 53 30	9	-10.42	.15	16.7	116	13			3.67	.58	B	PKB1453-10 Q80
		14 53 43	14	-9.34	.13	14.7	214	19	10	2				Z=1.938
		14 53 2	13	-10.53	.06	16.7	104	19	12	2				
		14 53 12	7	-10.73	.06	20.0	54	15	15	2				
		14 53 22	9	-10.32	.04	25.0	70	20	9	2				
270	OR 1454-05	14 54 12	20	-5.01	.16	16.7	69	13			1.89	.62	B	4C-05.61 0
		14 53 55	14	-4.80	.03	14.7	96	21	14	2				
		14 54 35	7	-4.40	.05	16.7	63	14	19	2				
		14 53 55	10	-4.71	.09	25.0	33	21	13	2				
271	OR 1454-05	14 54 43	7	-5.88	.13	16.7	73	20			1.84	.79	C	4C-05.62 Q80
		14 54 24	24	-6.62	.13	14.7	89	34	3	1				Z=1.249
		14 54 44	7	-5.79	.03	20.0	33	13	15	2				
		14 54 44	11	-6.02	.05	25.0	34	23	3	1				
272	OR 1458-08	14 58 47	20	-8.20	.12	16.7	80	48			2.43	1.67	C	0Q-098
		14 57 33	28	-8.11	.20	12.6	4 86		10	2				+0Q-099
		14 57 53	27	-8.09	.20	14.7	4 31		8	2				+0Q-097.2
		14 58 3	22	-8.94	.24	16.7	27	58	2	1				
		14 58 53	12	-8.79	.05	20.0	63	21	2	1				
		14 59 23	13	-8.10	.02	25.0	26	26	2	1				
273	OR 1502-10	15 2 48	22	-10.49	.25	16.7	83	27			.88	.92	C	
		15 2 42	40	-10.51	.75	14.7	86	36	2	1				
		15 2 2	29	-11.39	.13	16.7	104	38	3	1				
		15 2 12	21	-11.21	.17	20.0	36	33	4	1				
		15 2 42	13	-10.31	.05	25.0	62	26	5	2				
274	OR 1506-07	15 6 16	30	-7.43	.18	16.7	36	21			-.75	1.38	C	PKB1506-07
		15 6 27	88	-7.36	.36	12.6	30	61	7	2				PKB1508-07
		15 6 32	48	-7.71	.27	14.7	33	46	6	1				
		15 6 19	45	-7.28	.84	16.7	27	30	16	2				
		15 5 54	47	-7.36	.21	20.0	45	23	5	1				
275	OR 1511-08	15 11 54	39	-8.19	.21	16.7	58	16			1.12	.48	C	MSH15-006
		15 11 43	30	-8.47	.11	12.6	83	52	5	1				
		15 12 3	22	-7.66	.08	14.7	25	37	6	1				
		15 10 42	29	-8.39	.06	20.0	47	43	4	1				
		15 10 38	40	-8.75	.38	25.0	37	23	8	2				
276	OR 1514-08	15 14 44	23	-8.75	.15	16.7	54	73			.52	2.55	C	OR-024
		15 15 23	12	-8.49	.08	16.7	38	28	9	2				OR-023.9
		15 14 33	15	-8.89	.03	20.0	82	25	7	2				
		15 14 13	12	-7.89	.13	25.0	35	25	2	1				

ORIGINAL PAGE IS
OF POOR QUALITY

137

NO.	SOURCE NAME	RA 1950 H M S	HRH. SNG.	D 1950 LMO.	MTH. LMO.	PRMO. MCG.	PLAZ. P.U.	HRH. PC	H	MRA	SP. END.	HRH. W	IDENTIFICATION RADIO OPTIC.	
277	OR 1520-07	15 20 16	44	-7.40	.10	16.7	21	82			-2.67	2.18	C	MM15-010
		15 19 53	73	-7.30	1.06	12.6	60		2	1				
		15 21 33	25	-8.17	.36	16.7	37	52	2	1				
		15 21 33	14	-7.65	.17	20.0	15	47	7	2				
		15 19 3	12	-7.35	.06	25.0	67	25	2	1				
278	OR 1520-05	15 20 4	17	-5.10	.12	16.7	24	27			-1.82	1.17	C	4C-04.39
		15 20 25	49	-5.01	.38	14.7	31		4	2				
		15 19 34	12	-5.30	.13	16.7	27	26	3	1				
		15 20 25	13	-5.01	.13	20.0	29	20	4	2				
		15 20 35	10	-4.90	.17	25.0	58	39	2	1				
279	OR 1522-06	15 22 52	7	-6.25	.12	16.7	91	16			-.74	.57	D	4C-06.41 0
		15 21 54	21	-6.49	.24	12.6	80	48	6	1				2-128
		15 22 54	14	-6.73	.20	14.7	106	21	6	1				
		15 23 4	10	-6.56	.06	16.7	61	20	9	2				
		15 22 44	11	-6.45	.04	20.0	111	19	10	2				
		15 22 54	5	-6.04	.03	25.0	123	13	3	1				
280	OR 1528-09	15 28 24	27	-9.23	.18	16.7	40	17			3.74	.69	C	OR-047
		15 29 42	19	-9.36	.24	14.7	66	33	6	2				
		15 28 25	27	-8.06	.36	16.7	38	54	7	1				
		15 28 12	22	-9.40	.24	20.0	10	34	4	2				
		15 28 22	9	-9.23	.09	25.0	9	38	4	2				
281	OR 1532-08	15 32 54	10	-8.56	.17	16.7	59	32			2.49	1.74	C	OR-056
		15 33 42	69	-9.09	1.08	12.6	81		3	1				
		15 32 43	11	-8.81	.09	16.7	30	22	8	2				
		15 33 3	12	-8.03	.13	20.0	51	22	5	2				
		15 33 3	16	-8.57	.09	25.0	13	41	4	2				
282	OR 1545-06	15 45 1	18	-6.69	.09	16.7	39	18			1.30	1.30	B	OR-077 + OR-075 + OR-073
		15 46 24	49	-6.57	.38	10.0	419		4	1				
		15 43 54	32	-6.55	.46	12.6	72		4	1				
		15 44 33	19	-6.79	.24	16.7	27	67	11	1				
		15 44 33	13	-6.78	.11	16.7	39	29	8	2				
		15 45 33	12	-6.65	.11	20.0	27	26	3	1				
283	OR 1553-12	15 53 5	23	-12.84	.17	16.7	90	13			2.76	.60	C	OR-189
		15 53 33	54	-11.44	.71	14.7	129	24	7	1				
		15 51 56	46	-11.44	.68	16.7	79	27	5	1				
		15 53 40	13	-12.52	.24	20.0	62	22	4	1				
		15 52 30	14	-12.93	.09	25.0	27	28	3	1				
284	OR 1613-06	16 13 58	10	-6.07	.08	16.7	41	19			1.29	1.05	B	MM16-003
		16 14 4	30	-5.91	.36	12.6	56	47	7	1				
		16 13 34	16	-6.15	.11	14.7	55	33	6	1				
		16 14 4	15	-5.76	.17	16.7	17	65	5	1				
		16 14 4	10	-6.09	.06	20.0	33	20	8	1				
285	OR 1614-08	16 14 59	21	-8.71	.29	16.7	66	42			-.27	1.89	C	MM16-006
		16 16 42	22	-8.96	.30	14.7	49	47	4	2				
		16 15 42	14	-8.52	.09	16.7	41	31	6	2				
		16 14 42	7	-9.23	.03	20.0	86	15	2	1				
		16 14 42	15	-8.20	.03	25.0	43	30	3	1				

ORIGINAL PAGE IS
OF POOR QUALITY

138

NO.	EXPERIMENT NAME	HA 1950 H M S	MRK. DMS.	NO. 1950 DMS.	MRK. DMS.	PRNG. MKS.	PLAZ F.U.	MRK. PC	N	NRA	SP. IND.	MIN.	W	IDENTIFICATION RADIAL PITCH
46	GR 1637-06	16 57 51	17	-6.10	.13	16.7	42	29			1.54	2.03	C	40-05.30
		16 58 2	25	-6.23	.26	14.7	43	34	3	1				
		16 58 12	19	-6.02	.24	16.7	47	35	3	1				
		16 57 33	13	-6.10	.13	20.0	31	38	3	1				
227	GR 1717-43	17 17 35	12	-5.43	.05								B	07-032
		17 15 14	41	-5.00	.46	14.7	4 65		5	1				
		17 15 34	37	-4.43	.38	16.7	4 34		2	1				
		17 17 54	11	-5.31	.09	20.0	43	19	4	1				
		17 17 34	5	-5.43	.03	25.0	96	14	2	1				
228	GR 1728-06	17 28 8	12	-6.54	.12	16.7	118	16			6.54	1.29	C	40-06.51
		17 28 2	11	-6.67	.11	14.7	273	16	2	1				
		17 28 2	25	-6.51	.17	16.7	112	32	2	1				
		17 28 33	23	-6.52	.30	20.0	37	38	2	1				
245	GR 2101-05	21 1 58	14	-5.32	.13	16.7	94	18			.30	1.02	C	40-05.86
		21 1 25	28	-4.78	.24	14.7	75	43	2	1				
		21 1 35	20	-4.82	.11	16.7	105	27	2	1				
		21 2 5	18	-5.31	.05	20.0	90	38	2	1				
		21 2 15	26	-5.51	.06	25.0	72	30	2	1				
246	GR 2106-06	21 6 19	18	-6.77	.03	16.7	41	43			-1.12	1.24	C	40-06.67
		21 7 14	25	-6.45	.24	14.7	30	40	2	1				
		21 5 34	15	-6.37	.17	20.0	30	22	5	1				
		21 6 24	7	-6.78	.02	25.0	43	17	4	1				
247	GR 2113-02	21 10 6	23	-2.27	.13	16.7	33	41			.67	1.42	C	40-01.55 QSO
		21 11 16	33	-2.46	.51	12.6	113		4	1				
		21 8 46	31	-2.46	.60	16.7	42	60	2	1				
		21 10 6	17	-2.43	.17	20.0	26	36	3	1				
		21 10 26	19	-2.27	.17	25.0	27	38	5	1				
248	GR 2141-05	21 41 23	12	-5.82	.09	16.7	76	98			1.17	3.93	C	40-06.70
		21 41 15	24	-4.15	.20	16.7	41	47	2	1				
		21 41 25	16	-5.80	.06	20.0	83	26	2	1				
		21 41 25	23	-5.65	.30	25.0	28	48	2	1				
249	GR 2154-11	21 54 34	17	-11.48	.12	16.7	76	12			5.34	1.01	H	PKS2154-11
		21 55 13	16	-11.58	.24	14.7	130	20	4	1				
		21 54 13	12	-11.36	.13	16.7	76	18	3	1				
		21 54 33	11	-11.59	.15	20.0	29	23	4	1				
254	GR 2156-09	21 56 12	21	-9.95	.20	16.7	93	22			3.71	1.74	C	OK-195 OK-092
		21 56 14	28	-10.23	.24	14.7	144	33	2	1				
		21 55 44	26	-9.86	.20	16.7	98	34	4	1				
		21 56 34	24	-9.73	.30	20.0	66	38	3	1				
255	GR 2157-04	21 57 14	35	-4.50	.21	16.7	54	30			1.46	1.66	C	40-04.83
		21 57 40	100	-4.34	.27	12.6	78	59	4	1				
		21 57 46	44	-4.54	.36	20.0	52	68	3	1				
		21 56 46	38	-4.58	.30	25.0	25	73	2	1				

ORIGINAL PAGE IS
OF POOR QUALITY

139

NO.	SCIENCE NAME	RA 1950 H M S	DEC. D M S	D 1950 J20.	MRN. J20.	PMNG. MAG.	PLAX P.U.	MRN. PO	M	MRA	SP. IND.	MRN. IND.	W	IDENTIFICATION RADIO OPTIC.
296	OR 2205-03	22 5 27	18	-3.06	.15	16.7	62	34			2.33	1.75	C	MRN22-04
		22 5 6	26	-3.30	.24	16.7	65	80	4	1				
		22 5 6	14	-3.16	.06	16.7	76	80	7	2				
		22 5 16	10	-3.62	.17	20.0	86	23	9	2				
		22 4 46	17	-2.63	.15	23.0	37	34	2	1				
297	OH 2211-08	22 11 48	15	-4.68	.06	16.7	80	49			2.15	1.41	M	MRN22
		22 12 25	35	-4.64	.58	16.7	79	3	1					
		22 12 25	20	-4.63	.17	16.7	102	27	5	1				
		22 12 25	14	-4.81	.20	20.0	20	36	5	2				
		22 11 35	6	-4.68	.08	23.0	24	16	5	1				
298	OR 2221-02	22 21 52	8	-2.35	.03	16.7	192	7			.70	.32	A	3C445 Q
		22 22 26	8	-2.44	.05	12.6	196	16	11	2				20.036
		22 22 6	3	-2.49	.02	16.7	248	11	12	2				
		22 21 36	5	-2.36	.07	16.7	185	12	16	2				
		22 21 56	4	-2.35	.01	20.0	158	11	17	2				
		22 21 36	3	-2.32	.01	23.0	149	12	17	2				
299	OR 2224-05	22 24 18	13	-5.04	.08	16.7	36	21			.58	.92	M	3C446 Q20
		22 24 36	57	-5.45	.58	12.6	46	4	2					20.004
		22 24 6	28	-5.03	.26	16.7	47	38	6	2				
		22 23 46	22	-5.46	.24	16.7	38	20	2	2				
		22 24 16	10	-4.99	.06	20.0	31	30	2	2				
		22 24 56	21	-5.17	.17	23.0	32	41	2	1				
300	OR 2237-04	22 37 23	9	-4.39	.04	16.7	78	14			1.40	.58	A	4C-04.85 Q2A
		22 37 26	10	-4.24	.11	12.6	98	20	7	2				
		22 37 23	42	-4.31	.05	14.7	75	30	12	2				
		22 37 18	32	-4.46	.03	16.7	117	22	15	2				
		22 37 17	34	-4.40	.12	20.0	37	12	20	2				
		22 37 6	23	-4.30	.04	23.0	44	18	21	2				
301	OR 2239-10	22 39 46	40	-10.35	.17	16.7	63	67			1.90	4.25	C	PKS2240-107 Q20
		22 39 58	127	-10.83	.51	14.7	148	43	4	1				
		22 39 55	14	-10.79	.24	16.7	28	38	5	1				
		22 40 45	15	-10.43	.15	20.0	31	25	5	1				
302	OR 2244-03	22 44 10	16	-3.22	.07	16.7	73	38			2.24	1.30	B	4C-03.81 Q20
		22 44 56	10	-3.02	.05	16.7	39	19	9	2				
		22 44 16	8	-3.26	.03	20.0	62	15	10	2				
		22 43 56	5	-3.27	.04	23.0	27	14	10	2				
303	OH 2246-06	22 46 48	36	-6.24	.10	16.7	93	24			1.19	1.07	C	QJ-016
		22 46 16	60	-5.39	.58	14.7	63	3	1					
		22 46 6	24	-5.19	.24	16.7	84	22	3	1				
		22 47 46	15	-6.14	.04	20.0	84	25	2	1				
		22 45 36	20	-6.37	.06	23.0	51	38	2	1				
304	OR 2248-03	22 48 8	16	-3.19	.18	16.7	131	13			1.29	1.03	C	MRN22-017
		22 47 47	26	-2.38	.37	12.6	80	4	2					
		22 47 56	13	-2.59	.31	14.7	178	18	5	1				
		22 48 46	26	-3.85	.09	16.7	150	34	2	1				
		22 48 36	26	-3.89	.13	20.0	120	41	2	1				

ORIGINAL PAGE IS
OF POOR QUALITY

40

NO.	SOURCE NAME	RA 1950 H M S	DEC. D M S	D 1950 H M S	RAH. LMO.	PMH. LMO.	PLUX P.U.	ERR. PC	H M	MVA IND.	MP. IND.	MMH. IND.	V	IDENTIFICATION RADIO OPTIC.
303	GR 2323-08	22 53 13	17	-8.75	.07								C	MMH23-021
		22 53 5	28	-8.66	.75	12.6	-88		2	1				
		22 53 16	23	-7.94	.70	16.7		22	31	2	1			
		22 53 26	15	-8.57	.04	20.0	80	23	8	2				
306	GR 2304-07	22 4 9	13	-7.70	.04								B	MMH23-005
		22 4 16	26	-7.82	.30	12.6	-65		2	1				
		22 4 46	65	-7.47	.38	14.7	-122		2	1				
		22 4 6	15	-7.72	.06	16.7	184	22	2	1				
		22 4 16	17	-7.68	.05	23.0	75	24	2	1				
307	GR 2318-08	22 18 21	13	-8.62	.12	16.7	70	15			.88	.51	B	JKS2318-087 Q80
		22 18 46	26	-8.62	.24	12.6	120	27	5	2				
		22 18 56	28	-8.93	.24	14.7	-55		7	2				
		22 18 6	14	-8.43	.13	16.7	58	25	7	2				
		22 18 24	25	-8.71	.05	20.0	34	27	4	2				
		22 18 6	10	-7.95	.15	23.0	53	21	2	1				
308	GR 2325-02	22 25 16	8	-2.36	.04	16.7	71	7			.37	.32	A	PKS2324-02 0
		22 26 7	36	-2.22	.67	12.6	-76		9	2				
		22 25 17	17	-2.05	.20	14.7	82	27	12	2				
		22 25 22	8	-2.22	.16	16.7	69	15	16	2				
		22 25 17	7	-2.30	.03	20.0	64	16	12	2				
		22 26 27	6	-2.34	.01	23.0	63	18	12	2				
309	GR 2324-05	22 24 30	27	-5.27	.14	16.7	47	27			.89	1.30	C	4C-05.97
		22 26 7	17	-4.79	.11	14.7	49	26	6	2				
		22 25 47	22	-5.21	.11	16.7	39	27	7	2				
		22 27 21	13	-5.43	.06	20.0	55	22	5	2				
		22 26 27	17	-5.26	.15	23.0	23	24	2	1				
310	GR 2340-08	22 40 55	28	-8.56	.12	16.7	77	22			1.72	2.30	C	02-066
		22 42 27	27	-8.27	.20	14.7	62	46	6	2				
		22 40 47	28	-8.45	.09	16.7	95	26	4	1				
		22 40 27	13	-8.70	.08	20.0	53	22	5	2				
311	GR 2344-07	22 44 28	12	-7.73	.11	16.7	76	15			2.16	1.20	C	PKS2344-07
		22 44 27	36	-6.81	.75	12.6	89	60	2	1				
		22 44 27	20	-6.99	.30	14.7	86	31	2	1				
		22 44 27	11	-7.73	.08	16.7	90	18	4	1				
		22 44 7	13	-7.88	.17	20.0	46	21	4	1				
312	GR 2346-02	22 46 37	9	-2.61	.05								C	4C-02.90
		22 46 27	19	-2.39	.05	14.7	122	25	7	2				
		22 46 17	38	-2.04	.58	16.7	-72		2	1				
		22 46 27	10	-2.64	.05	20.0	-65	19	2	1				
313	GR 2346-10	22 46 48	17	-10.77	.11								C	02-179
		22 47 17	61	-11.10	.77	14.7	-91		2	1				
		22 46 27	10	-10.73	.11	20.0	43	18	6	1				
		22 46 7	52	-10.89	.20	23.0	54	29	2	1				

ORIGINAL PAGE IS
OF POOR QUALITY

41

NO.	SOURCE NAME	RA 1950 H M S	DEC. D M S	D 1950 DD	RA 1950 H M S	DEC. D M S	PRINC. FREQ.	FLUX F.U.	NOV. PC	N	WLA	SP. IND.	WLA	V	IDENTIFICATION RADIO OPTIC.
314	OR 2319-04	23 49 58	14	-4.29	.13									C	PER 2319-04
		23 49 47	62	-3.33	.38	12.6	-60		32	2	1				
		23 49 47	12	-3.34	.06	16.7	42		32	2	1				
		23 49 17	80	-3.36	.03	20.0	48		32	6	2				
315	OR 2352-06	23 52 9	21	-4.09	.17									C	HEM 23-021
		23 52 7	40	-4.03	.34	16.7	-47		32	2	1				
		23 52 37	21	-3.99	.17	16.7	38		32	2	1				
		23 52 17	79	-4.08	.17	20.0	54		32	3	1				
316	OR 2355-02	23 55 16	14	-2.68	.08	16.7	60		26			2.43	.80	C	SC 23.91 10-02.02
		23 55 7	79	-2.24	.77	12.6	-107		44	2	1				
		23 54 47	31	-2.26	.47	16.7	56		44	2	1				
		23 55 47	16	-2.99	.27	20.0	60		27	2	2				
		23 55 7	80	-2.24	.04	25.0	32		27	4	2				

$$R = [(\alpha_{GR} - \alpha^*)^2 + (\delta_{GR} - \delta^*)^2]^{1/2},$$

/42

where α_{GR} , δ_{GR} are coordinates of the source, taken from this survey, α^* , δ^* are coordinates of the nearest source from the higher frequencies surveyed) for cases of comparison of this survey with catalogue 4C (bold line) and with the Parkes survey (fine line) carried out a frequency of 408 MHz with a resolution approximately equal (48') to the resolution of UPR-2. It is apparent from the the figure that both curves are very consistent for $R \leq 0.8$ where apparently the same sources, measured in different surveys, are compared.

That is why in spite of the low declination for the given range, the number of sources in the survey 4C, which may be compared with the sources from this survey, the results of this comparison may be used to determine the measurement precision of the coordinates.

As was shown in publication [4], the density distribution of the probability $P(R)$ of the distance are between the closest sources from the surveys GR and 4C is close to the Raleigh one. It was found that the distribution of the differences of the straight ascensions and the declination for all the nearest sources from the GR and 4C surveys may be considered close to the normal one with zero averages and for this declination range.

Thus the distribution of the distance R should be close to the Raleigh one for the given case also.

Using this result it is possible to determine the value of the maximum distance R_{max} , for which the sources from comparable catalogues may with a pregiven probability be considered as the same. Figure 2 (b) gives the experimentally obtained density

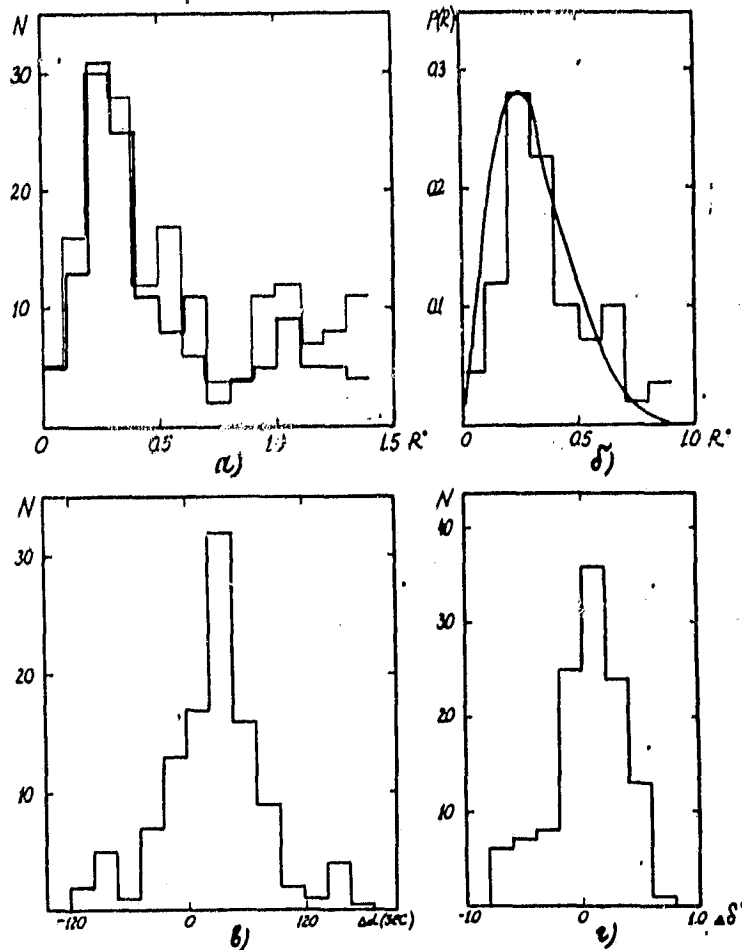


Figure 2.

distribution of the probability of the distance R and its approximate Raleigh distribution $P(R)$ with parameters $R_0=0.25$, $P(R_0)=0.28$, where R_0 is the value of R corresponding to the maximum distribution.

Giving the probability $P=0.99$ that the sources inside the range $0 < R < R_{\max}$ are mutually identifiable, from the approximating Raleigh distribution we obtain $R_{\max}=0.75^\circ$. On Figure 2 (v,g) the

ORIGINAL PAGE IS
OF POOR QUALITY

histograms of distribution of the difference of the straight ascensions $\Delta\alpha = \alpha_{GR} - \alpha_{4C}$ (sec) and the differences of declination $\Delta\delta = \delta_{GR} - \delta_{4C}$ (degrees) are given for mutually identifiable sources (that is for those for which $R \leq 0.75^\circ$). The average values $\langle \Delta\alpha \rangle$, $\langle \Delta\delta \rangle$, $\langle R_e \rangle$ and their errors for these sources obtained from the experimental data, and the calculated values $\langle R_p \rangle$ and σ_p , obtained from the approximating distribution, are given in Table 2.

TABLE 2

$\langle \Delta\alpha \rangle$	$\sigma_{\Delta\alpha}$	$\langle \Delta\delta \rangle$	$\sigma_{\Delta\delta}$	$\langle R_e \rangle$	σ_{R_e}	$\langle R_p \rangle$	σ_{R_p}
33.1 ± 4	44.7	0.08 ± 0.03	0.18	0.32 ± 0.02	0.18	0.31	0.25

It is apparent from the table that the calculated and experimental values are $\langle R \rangle$ and σ_R practically coincide.

II. Discussion

The comparison of the data of the catalogue GR with other catalogues make it possible to detect several new sources, whose data are given in Table 3.

TABLE 3

No. of item	Source name	α 1950 h m s.	Error sec.	δ 1950	Error Deg.	Spectral index	Error	S16.7 Jan.	Error	W
1	0528-05	05 28 38	13	-05.50	0.19	1.61	1.62	49	0.29	C
2	0542-02	06 42 43	15	-02.49	0.19	3.52	1.95	66	0.31	C
3	0921-03	09 21 28	25	-03.17	0.16	2.65	0.97	87	0.20	B
4	1502-10	15 02 48	22	-10.49	0.25	0.88	0.92	83	0.27	C

/45

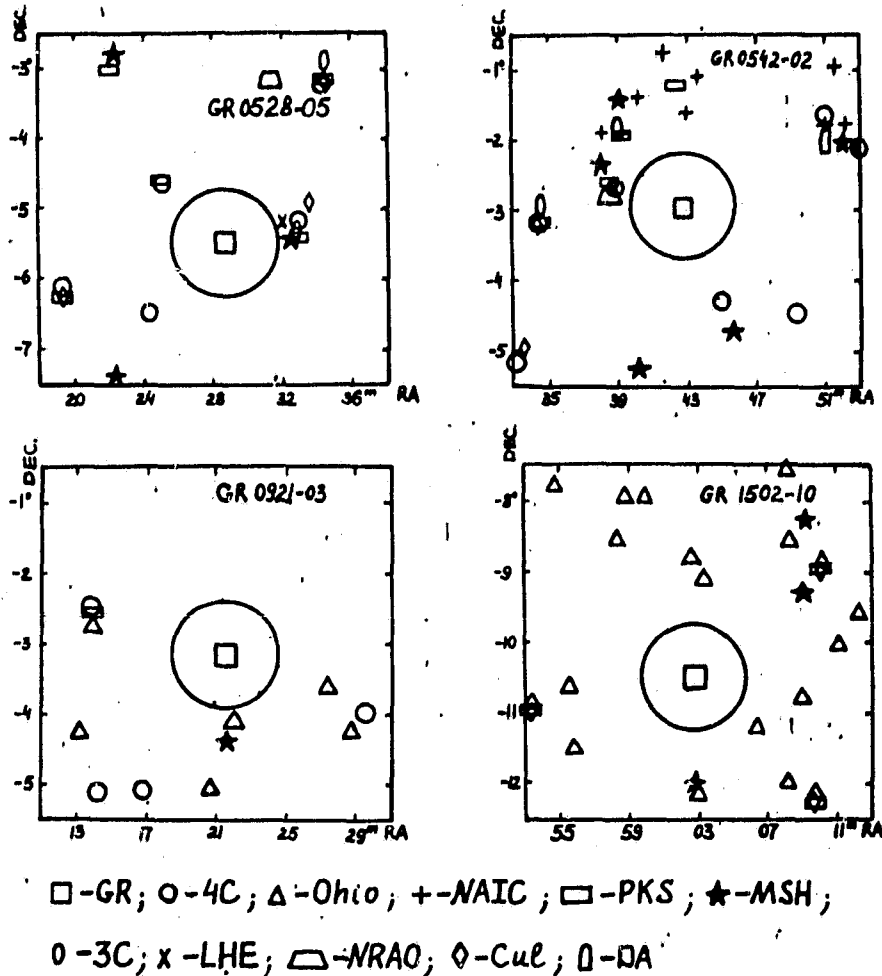


Figure 3.

It was not possible to identify these sources with the sources of the catalogue with which a comparison of the GR catalogue was carried out [6-18]. For such identification of sources the region close to each of them, in a circle with a radius 0.75° was considered. Figure 3 shows for four new sources the regions of comparison, where the right ascensions are plotted

/46

in minutes on the axes of abscissa, and on the axes of ordinates the declination in degrees. The data on the origin of the sources taken from these or other catalogues are indicated by different symbols. A source from the GR catalogue is placed in the center of the circle. As follows from the figure not a single of the sources taken from the known catalogues falls inside the circle. Thus the indicated sources of the GR catalogue may with a 0.99 probability be considered new.

The results of the identification of other sources of the GR catalogue are given in Table 1, and that is why the regions similar to those which were considered for the new sources are not given on Figure 3.

REFERENCES Q

/47

1. Braude, S. Ya., A. V. Men', L.G. Sodin, "Radio telescope of the decameter wave range UTR-2," in the book: Antenny [Antennas], Edited by A. A. Pistol'kors, Vol. 26, 1978, p. 3.
2. Braude, S. Ya. A.V. Megn, V.P. Ryabov, N.K. Sharykin and I.N. Zhouck, "Decametric survey of discrete sources in the northern sky. I. The UTR-2 radio telescope. Experimental techniques and data processing," Astrophys. Space Sci. 54, 3 (1978).
3. Braude, S. Ya. A.V. Megn, S. L. Rashkovski, B.P. Ryabov, N.K. Sharykin, K.P. Sokolov, A.P. Tkatchenko and I.N. Zhouck, "Decametric survey of discrete sources in the northern sky. II. Source catalogue in the range of declinations $+10^{\circ}$ to $+20^{\circ}$," Astrophys. space Sci. 54, 37 (1978).
4. Braude, S.Ya., A.V. Megn, K.P. Sokolov, A.P. Tkatchenko and S.K. Sharykin, "Decametric survey of discrete sources in the northern sky. V. Source catalogue in the range of declinations 0° to $+10^{\circ}$," Astrophys. Space Sci. 64, 75 (1979).
5. Richter, G.A., "Search for optical identifications in the 5C3-radio survey. II. Statistical treatment and results," Astron. Nachr. 296, 65 (1975).
6. McEwan, N.J., I.W.A. Browne and J.H. Crowther, "Accurate positions and identifications for a complete sample of 341 radio sources from the Parkes $+0$ survey," Mem. Roy. Astron. Soc. 80, 1 (1975).
7. Wills, B.J., "Optical identifications of radio sources using accurate radio and optical positions. II." Astron. J. 12, 1031 (1976).
8. Smith, H.E., K. Spinrad and E.O. Smith, "The revised 3C catalogues of radio sources: a review of optical identifications and spectroscopy," Publ. Astron. Soc. Pacif. 88, 621 (1976).
9. C. Barbieri and M. Zambon, Catalogue of quasi stellar objects, Edition of Institute of Astronomy of the University of Padova, 1977. /48
10. Veron, V.P. and P. A. Veron, "A catalogue of radio sources identifications," 1979 Edition of Astron. Astrophys. Suppl. 18, 309 (1974).
11. Burbidge, G. and A.H. Crowne, "An optical catalogue of radio galactics," Astrophys. J. Suppl. 40/3, 583 (1979).

12. Gower, J.F.R., P.R. Scott, D. Wills, "A survey of radio sources in the declination range -07° to 20° and 40° to 80° ," Mem. Roy. Astron. Soc. 71, 49 (1967).
13. Shimmins, A.J., G.A. Day, R.D. Ekers and D.J. Cole, "The Parkes catalogue of radio sources," Australian J. Phys. 19, 837 (1966).
14. Durdin, J. M., D. Pleticha, J.J. Condon, M.J. Yarbury, D. L. Jauncey and C. Hazard, The NAIC 611 MHz multi-beam sky survey source list, NAIC report 45, March 1975, Arecibo, Puerto Rico, Itaca, New York.
15. Pauliny-Toth, I.I.K., C.M. Wade and D.S. Heeschen, "Positions and flux densities of radio sources," Astrophys. Journ. Suppl. 13/116, 65 (1966).
16. Galt, J.A., J.E.D. Kennedy, "Survey of radio sources observed in the continuum near 1420 MHz, declinations -5° to $+70^{\circ}$," Astron. J. 73, 135 (1968).
17. Long, R.J., J.B. Haseler and B. Elemore, "A survey of radio sources at 408 Mc/s." Mon. Not. Roy. Astron. Soc. 125, 313 (1963).
18. Dixon, R.S., "A master list of radio sources," Astrophys. J. Suppl. 20, 1.

APPENDIX 1

CALCULATION OF THE CONFUSION LEVEL OF THE UTR-2 RADIOTELESCOPE

One of the main factors leading to the increase of the /49
densities of the fluxes is the effect of confusion [2]. To take
this effect into account it is necessary to know the polar diagram
of the radiotelescope. As we know from the publication [1], the
DN of the UTR-2 vary strongly for different zenithal angles. This
dependence must be taken into consideration in determining the level
of confusion. We give below the calculation taking into account
the variation of the DN of the UTR-2 with the level of confusion.

The mean quadratic value of the fluctuation σ_c , caused by
confusion, determined in [2] is equal to

$$\sigma_c = \int_0^{S_m} S^2 N(S) \cdot \int_{\Omega} F^2(\Omega) d\Omega \quad (1)$$

here S is the flux density of the source; S_m is the maximum value
of S ; $N(S)$ is a probability that the flux of the source should be
greater than the given one; $S(\Omega)$ is the DN of the UTR-2 standardized
in power according to the mean maximum; Ω is the solid angle. It
follows from (1) that only the quantity

$$I = \int_{\Omega} F^2(\Omega) d\Omega, \text{ alone will}$$

vary on the orientation of DN, and the calculation of the quantity

$\int_0^{S_m} S^2 \alpha N(S) dS$ was given in the publication [2]. Substituting in (1)

the integration according to the solid angle Ω , by integrating
according to the directing cosine U, V , we may write

$$\int_{\Omega} F^2(\Omega) d\Omega = \int_{-1}^1 \int_{-1}^1 F^2(u, v) \frac{du dv}{\sqrt{1-u^2-v^2}} \quad (2)$$

here

$$F(u, v) = f_0(u, v) \cdot f_1(u) \cdot f_2(v), \quad (3)$$

where $f_0(u, v)$ is a factor taking into account the DN of the individual vibrator and the effect of the Earth. The factors of the antenna are divided and depend on $u-f_1(u)$ and on $v-f_2(v)$.

The numerical solution of the double integral (2) for fairly complex functions f_0 , f_1 and f_2 is very unwieldy to obtain and that is why we use a method which made it possible to pass from 51 the calculation of the double integral to two single integrals.

We write

$$\int_{u_{\min}}^{u_{\max}} \left[F^2(u, v) \frac{du dv}{(1-u^2-v^2)} \right] = \frac{1}{F_0^2(u_0, v_0)} \int_{v_1}^{v_2} f_2^2(v) \left[\int_{u_{\min}}^{u_{\max}} f_0^2(u, v) \cdot f_1^2(u) \frac{du}{(1-u^2-v^2)} \right] dv \quad (4)$$

here $F_0(u_0, v_0)$ is the value of the DN in the maximum for the position u_0, v_0 .

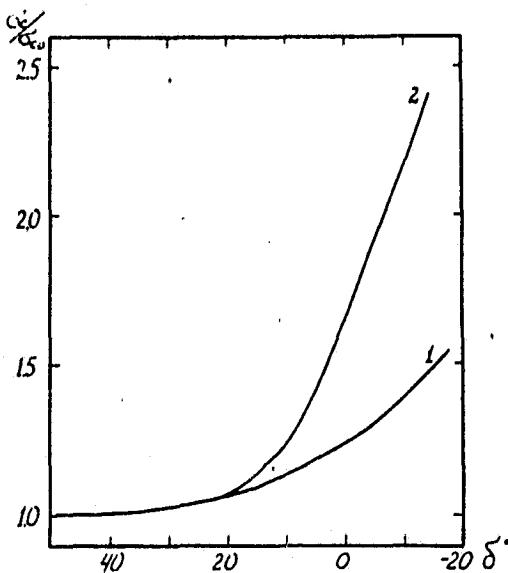


Figure 4.

The integral in square brackets may be calculated for a certain set of values of v_1 , finding in this connection the values u_{\max} and u_{\min} from the relation $\sqrt{1-u^2-v^2} > 0$. Thus it is possible to obtain the values of the internal integral as a certain function of V , $A(V)$. Substituting it into (4) and carrying out the integration, we obtain the

quantity in which we are interested. The value of the quantity σ_{c0} or the zenithal position, as calculated by the described method, is given in Table 4.

TABLE 4

f MHz	10	12,6	14,7	16,7	20	25
σ_{c0} Jan.	34,4	23,3	17,5	14,3	10,3	7,4

The dependence of σ_c/σ_{c0} on the declination is given on Figure 4 for values of the frequencies 10-20 MHz (curve 1) and 25 MHz (curve 2). It is apparent from the figure that σ_c begins to differ considerably from σ_{c0} for declinations $\delta \leq 0^\circ$.

ORIGINAL PAGE IS
OF POOR QUALITY